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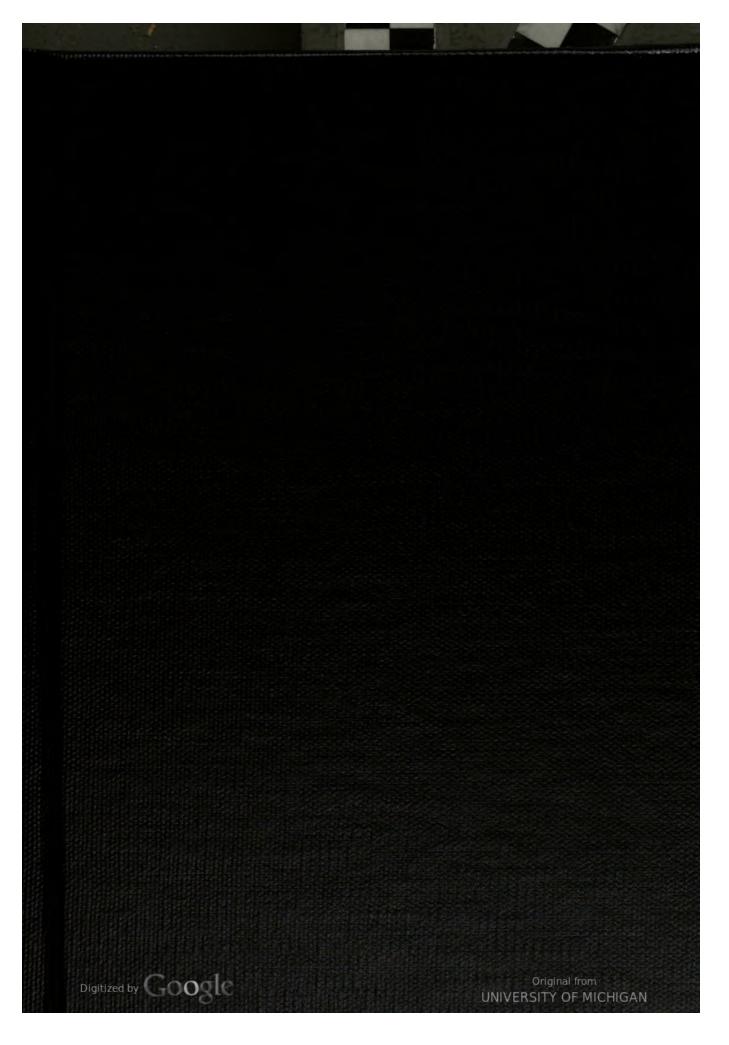


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THE AMERICAN NUMISMATIC SOCIETY

# MUSEUM NOTES 29



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#### THE AMERICAN NUMISMATIC SOCIETY

## MUSEUM NOTES 29



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NEW YORK
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## SOME EARLY FAR NORTHEASTERN SELEUCID MINTS

(Plates 1-2) Arthur Houghton and Wayne Moore

In the forty-five years since E. T. Newell's publication of Eastern Seleucid Mints¹ the appearance of important new numismatic material and the work of a number of scholars have helped dispel some of the mystery surrounding the early activity of mints operating in the far eastern part of the Seleucid empire. For example, new light has been shed on the production of coinage under Seleucus I and Antiochus I at the two cities of Seleucia on the Tigris² and Susa,³ and what Newell believed to have been a flourishing mint at Persepolis in the same period is now thought to have produced no coinage at all.⁴ A new mint, evidently producing silver coinage for local use only under An-

- <sup>1</sup> E. T. Newell, Eastern Seleucid Mints, ANSNS 1 (New York, 1938), cited hereafter as ESM. For their generous assistance in providing photographs and other information on which this article is based, we wish to thank Andrew Daneman of Summa Galleries, Beverly Hills; Gunther Dembski of the Kunsthistorisches Museum, Vienna; Frank L. Kovacs of San Francisco; Mrs. E. Marles of the Ashmolean Museum, Oxford; Martin Price of the Department of Coins and Medals, British Museum; T. R. Volk of the Fitzwilliam Museum, Cambridge; and Nancy Waggoner of the American Numismatic Society.
- <sup>2</sup> N. Waggoner, "The Early Alexander Coinage at Seleucia on the Tigris," ANSMN 15 (1969), pp. 21-30.
- 3 A. Houghton, "Notes on the Early Seleucid Victory Coinage of 'Persepolis'," SNR 59 (1980), pp. 5-11.
  - 4 Houghton (above, n. 3).



tiochus I, has been generally located in the Baluchistan area.<sup>5</sup> In the province of Bactra, the excavations at Aï Khanoum have produced evidence supporting the existence of a mint at that city, although the scope of its production remains very uncertain.<sup>6</sup> New examples of coinages which Newell recognized as being from the east and several previously unknown issues from the same general area have appeared, moreover, all adding depth to the scant material which he was able to catalogue from the far northeastern reaches of the Seleucid empire.<sup>7</sup>

A sufficient number of silver coins produced by one such mint now exists to give a clearer picture of its range of activity than Newell had supposed and to provide some indication of its general location. With no certain identification possible at this time, we propose to call it Mint X.

Mint X's production comprises a coherent series of Alexander-type issues struck in the name of Antiochus, including tetradrachms, drachms and hemidrachms. All are linked by the distinctive left field monogram  $\mathbb{Z}$ , and are related by technical and stylistic affinities. They are generally characterized by cupped flans, moderately so in the case of the tetradrachms, very evidently in that of the drachms and hemidrachms. Also, the die adjustment of the tetradrachms, where known, is in the upright position ( $\uparrow$  or  $\uparrow$ ), with the exception of one coin (Group 3, A2-P3); the dies of the smaller denominations appear to have been left unadjusted. The group is also unified by the unusual configuration of the inscription, which runs from beneath the exergue to the right of the figure of Zeus, curving around the rear throne leg so that the king's name must be read from the outside.

Stylistically, the issues of Mint X generally follow the conventions of Alexander-type coinage struck at other eastern mints, including Seleucia on the Tigris and Ecbatana. The Heracles head of the obverse retains the forceful brow and emphasized orbital common to late fourth



<sup>&</sup>lt;sup>5</sup> Houghton (above, n. 3), pp. 11-13.

<sup>&</sup>lt;sup>6</sup> P. Bernard and O. Guillaume, "Monnaies inédites de la Bactriane grecque à Aï Khanoum (Afghanistan)," RN 1980, pp. 17-19; see also G. le Rider, "Les Monnaies," Fouilles d'Aï Khanoum 1, Mémoires de la Delegation archaologique française en Afghanistan, 21 (Paris, 1973).

<sup>&</sup>lt;sup>7</sup> For example, C. Y. Petitot-Biehler, "Trésor de monnaies grecques et greco-bactriennes trouvé à Aï Khanoum (Afghanistan)," RN 1975, p. 40, no. 52; also, the many new issues discussed by Bernard and Guillaume, above n. 6, pp. 9-32.

century B.C. heroic imagery. The face, however, has a certain mannered refinement closely related to that appearing on tetradrachms of Seleucus I struck at Ecbatana, where the similarity of detail extends to the long and free-flowing lion's mane.<sup>8</sup> The reverses, which show the figure of Zeus seated on a throne without a back, have no close parallel among the Seleucid coinages of the east.

#### MINT X

#### ANTIOCHUS I

Obv. Head of Heracles in lion's skin r.

Rev. ΒΑΣΙΛΕΩΣ (in exergue) ANTIOXOY (to r., upward); Zeus seated l. on throne, holding scepter with l. hand and eagle in outstretched r.; to l., Z.

Group 1: M beneath throne.

#### **Tetradrachms**

A1-P1  $\uparrow$  14.32. BM (Oman Coll.). WSM, p. 35, cited as 755 $\delta$  and noted as being from the Punjab. Plate 1, 1.

A1-P1 † 17.43. SNGFitz 5524; WSM, p. 35, cited as 755F.

A1-P1 † 15.65. Kovacs 4, 8 Aug. 1983, 103 (ex ANS, Kelley Collection: see H. A. Troxell and N. Waggoner, "Robert F. Kelley Bequest," ANSMN 23 (1978), p. 37, 45); Glendinning, 18 Apr. 1955, 567. Possibly the same as the Sydenham coin, below. Plate 1, 3.

A1-P1 † 15.42. Vienna, Kunsthistorisches Museum. ESM 755 $\gamma$ . ? 15.65. Ex. Sydenham Coll. WSM, p. 35, cited as 755 $\varepsilon$ .

Group 2: M beneath throne.

#### Tetradrachm

A1-P2
14.90. The inscription has been extensively recut and the monogram is not fully clear. Naville 10, 15 June 1925, 836; ESM 755α ("cast?"). Plate 1, 4.



<sup>8</sup> Noted by Newell, ESM, p. 264.

#### Hemidrachms

#### Group 3: R beneath throne.

#### Tetradrachm

A2-P3 \ 15.53. BM. WSM, p. 35, cited as 755\ and noted as being from Chanda Mall (Pakistan). Plate 1, 7.

#### Drachm

a1-p1 The monogram appears to be № . Sotheby's, 20 Feb. 1980, 286. Plate 2, 8.

Group 4: R beneath throne.

#### Drachm

a2-p2 \( \chi \) 4.14. From Iran. Houghton 1308.9 Plate 2, 9.

Group 5: A beneath throne.

#### Drachm

a3-p3 ↓ 3.64. Said to be from Afghanistan. Private U.S. Coll. Plate 2, 10.

#### Uncertain Group

#### Hemidrachm

aiii-piii \( \) 2.05. Monogram beneath throne, if any, off flan. Ashmolean. WSM, p. 36, 755A. Plate 2, 11.

The relationship between the issues of Mint X and those of Ecbatana struck under Seleucus I extends to the cupped flans and unusual configuration of the inscription, which recall similar features on early

<sup>9</sup> A. Houghton, Coins of the Seleucid Empire, ACNAC 4 (New York, 1983); hereafter cited as CSE.



Alexander-type coins of Antiochus I also assigned by Newell to this mint.<sup>10</sup> An issue from the Median capital may have been used as a prototype for Mint X's tetradrachms; alternatively, an engraver from Ecbatana may have been transferred to cut the dies of the series. That the mint was not under the direct influence of Bactra seems likely, given the absence of Alexander-type issues within the known production of this mint and the fact that the dies of coins struck at Bactra were consistently adjusted to the inverted position.<sup>11</sup>

Only two obverse tetradrachm dies are known for Mint X. If one assumes a moderate but continuous rate of operation, the period of production for the entire series of Mint X's tetradrachms did not extend beyond a year or two. The drachms and hemidrachms could also have been struck within this time frame, perhaps a bit longer: with a very incomplete picture of the mint's production of small denomination coinage, it is more difficult to tell. The impression one has in any event is that Mint X's activity, and therefore importance, was very limited.

Based on the fact that elsewhere in the Seleucid east Alexander-type issues were struck during the early years of rule of Antiochus I, Mint X would appear to have been active under this king soon after 280 B.C., perhaps earlier.<sup>12</sup>

Where exactly Mint X was situated is problematical. The provenances of its coins range from Iran in the west to Rawalpindi, Pakistan, suggesting its location in the general area of Afghanistan or eastern Iran. One of the major cities of the area, such as Artacoana-Alexandria in Aria (Herat), could have issued the coins in question, but the limited production of Mint X would seem to preclude the



<sup>&</sup>lt;sup>10</sup> For example, ESM 508 and 512.

<sup>11</sup> ESM, p. 230 and note 9.

<sup>12</sup> See the Alexander-type coins of Seleucus I, WSM, p. 35, 754A (a tetradrachm) and ESM 754 (a hemidrachm), with the left field monogram  $\clubsuit$ , and  $\Join$  beneath the throne, which may have been struck at Mint X. They differ from the issues of Mint X in their crude obverse style and their inscriptions, which show the king's title and name on two lines to the right of Zeus. The find spot of the tetradrachm, to the east of the Helmand River in Seistan is, if not indicative, at least suggestive of a mint site in southern Afghanistan.

likelihood of a major provincial center.<sup>13</sup> An alternative possibility is the area of southern Afghanistan near Kandahar, which may lie close to the site of ancient Alexandria Arachosia. Kandahar itself is on a southern branch of the route from western Iran which passes first through Herat, turns southward to Seistan, then goes up the Helmand Valley to present-day Kabul.<sup>14</sup> Coins produced at a city in this area would have been likely to reflect the style and technique of issues struck at Ecbatana, but not necessarily those of Bactra, whose location north of the Hindu Kush would have made contact with Seistan difficult at best.<sup>15</sup>

Several other issues in silver and bronze from the general area of Afghanistan, of a style and technique quite different from those of Mint X, can be added to the material of known eastern origin. We propose to assign a coherent small group of these to Mint Y.

#### MINT Y

#### ANTIOCHUS I

Obv. Head of Heracles in lion's skin r.

Rev. BASIAE $\Omega$ S (in exergue) ANTIOXOY (to r., upward) Zeus seated l, on throne, holding scepter with l. hand and eagle in outstretched r.

13 There is no compelling reason, in any case, to revise Newell's somewhat tentative assignment of ESM 727-45, issues of Antiochus I, II and Seleucus II, to Artacoana, comprising as they do a major mint series of royal coin types, produced over a period of more than 30 years. While these coins have cupped flans like the issues of Mint X, there is no monogram or stylistic relationship between the two groups.

<sup>14</sup> K. Fischer, "Zur Lage von Kandahar an Landverbindungen zwischen Iran und Indien," *Bonner Jahrbucher* 167 (1967), pp. 129-32, documents the route but provides little evidence for the location of ancient cities between Herat and Kabul.

<sup>15</sup> A professional Afghani, who has dealt extensively with Seleucid coins in his own country, has mentioned the frequent appearance of drachms with cupped flans from the area of Seistan. It is difficult to give great weight to the report without the specifics of the coins themselves, but it intersects with other information pointing to a possible location of Mint X in the southern part of Afghanistan.



#### **Drachms**

a1-p1	<b>↑</b>	3.84. To 1., uncertain monogram; beneath throne, $\Pi$ .
		Private U.S. coll. From Afghanistan. Plate 2, 12.
a2-p2	1	3.64. King's title off flan; to l., 🖂; beneath throne, 🖼.
		Private U.S. coll. From Afghanistan. Plate 2, 13.
a3-p3	1	3.47. To l., R; beneath throne, traces of monogram.
		BM. Plate 2, 14.

The three known drachms of Mint Y, also Alexander-types issued in the name of Antiochus, are all struck in low relief on relatively flat flans. There are no die or monogram links between the individual coins, but they are unified by the configuration of their inscriptions, which like those of Mint X run from the exergue to the right field behind Zeus, and by their stylistic cohesion (the dies of all three appear to have been cut by the same hand). Like the small denomination issues of mint X, their dies are unadjusted.

The few examples cited above are insufficient to give more than a very incomplete picture of the activity of Mint Y. Their provenance (all are from Afghanistan) is too vague to isolate a specific locality where they may have been struck, but their epigraphic similarity to the issues of Mint X and their general relationship to the Alexander-type coins of Seleucus and Antiochus produced further to the west also suggest a mint operating in the general area of southern Afghanistan in the years shortly after Antiochus's accession. Little more than this can be said at the present time.

Two other mints appear to have issued silver coinage of the Alexander-type from locations in the general area of Afghanistan during the early Seleucid period. Both evidently operated for only very brief periods. One is represented by a tetradrachm and a drachm struck under Seleucus I on very flat flans with unadjusted dies, united by a common monogram and similar styles. Their inscriptions, in both instances  $\text{BASI} \land \text{EOS} \ \Sigma \text{E} \land \text{EY} \ \text{KOY}$ , are written in two lines to the right of Zeus but face in different directions (read from the inside in the case of the tetradrachm, from the outside in that of the drachm). The tetradrachm was found at Ai Khanoum; the drachm is from Iran. It is not now



possible to establish the exact site of the mint producing these issues, although it has been located in a very general manner in the east.<sup>16</sup>

The site of the second mint is equally uncertain. It is represented by two tetradrachms, both from India (ESM 747-48), struck during the co-regency of Seleucus I and Antiochus I. They have no monogram in common, but have a similarity of fabric, style, reverse detail, and die adjustment († in both cases). Newell has proposed their assignment to a mint in eastern Iran, possibly Alexandria Prophthasia in Seistan. Bernard and Guillaume have suggested instead a mint in Bactria, not Bactra itself. The arguments for—and against—each seem equally strong.

Two recently discovered bronze coins of Antiochus I, also from Afghanistan, may be related to the mint at Aï Khanoum. Both coins, a double and a unit, are part of a series modeled on the staters of Alexander the Great and Seleucus I, with the obverse type of a helmeted Athena head, the reverse that of a standing Nike bracketed by the inscription  $BA\Sigma I \Lambda E\Omega\Sigma$  ANTIOXOY (Plate 2, 15 and 16). As is commonly the case with bronze coinage struck in the east, the edge of their flans is beveled. The coins of the group, including the related double and three halves found in the excavation material at Aï Khanoum, have no monograms. The unit illustrated at Plate 2, 16, fills a gap in the series, all of the known examples of which have inverted dies.

The latter element in itself suggests that this group was produced at a mint associated with the provincial center of Bactra. The provenance of four examples in controlled excavations at Aï Khanoum adds to the possibility that this site was the originating mint, although the evidence is not conclusive. Other bronze issues of Antiochus I have been found in the Aï Khanoum excavations in such quantities as to indicate unequivocally the existence of a mint at this site producing small denomination coinage.<sup>21</sup>



<sup>&</sup>lt;sup>16</sup> Petitot-Biehler (above, n. 7), p. 40, no. 52 (tetradrachm); CSE 1305 (drachm).

<sup>17</sup> ESM, p. 261.

<sup>18</sup> Bernard and Guillaume (above, n. 6), p. 19, n. 19.

<sup>19</sup> Both coins are in the W. Moore collection, Portland, Oregon. The double: ↓ 5.98: Plate 2, 15; the unit: ↓ 4.47: Plate 2, 16.

<sup>20</sup> Bernard and Guillaume (above, n. 6), pp. 29-30, no. 4.

<sup>&</sup>lt;sup>21</sup> Bernard and Guillaume (above, n. 6), p. 21, no. 1.

Our current state of knowledge, including the evidence of the new material from Aī Khanoum and Mints X and Y, does not radically change the picture which emerged from Newell's study: that of a single major mint in the Seleucid northeast, at Bactra, operated from the second decade of the third century to ca. 256 or later.<sup>22</sup> It does however, add to our understanding of supplemental mint activity in the same area and period, particularly under Antiochus I. In the early part of his reign, Antiochus appears to have established a small group of mints located from Bactra in the north, through Seistan, to the western edge of the Baluchistan desert in the south. The types of silver issues produced at these mints were based on coins struck at major provincial mints of western Iran, replicated stylistically as well as iconographically. The principal routes of travel seem to have determined the transfer of form—Alexander-types from Ecbatana to Bactra and Seistan; Victory types from Susa to Baluchistan.

The period of production of these peripheral mints appears in each instance to have been quite short. The reasons for this are obscure, and perhaps not identical in the case of each mint. On the one hand, their brevity of operation suggests that the need for locally-produced money was not as great as may have been originally perceived, and that currency requirements were in time met from other sources. On the other, the possibility exists that one or more mints may have been opened as much for political as monetary reasons, perhaps during the early period of Antiochus's city-building, which extended to the empire's easternmost reaches. In such circumstances, the coins would have functioned as a symbol of Seleucid territorial preemption.

A firmer determination of cause will have to wait until a fuller picture is available of the archaeology and numismatics of the area in the early hellenistic era. Today, the new numismatic material and the excavations at Aī Khanoum provide a tantalizing and still very incomplete glimpse of a broader pattern of mint activity in this period than was hitherto known.



<sup>&</sup>lt;sup>22</sup> For the chronology, see the discussion in CSE, p. 118.

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## HELLENISTIC COINAGE AT SCEPSIS AFTER ITS REFOUNDATION IN THE THIRD CENTURY B.C.

(PLATE 3)

JONATHAN H. KAGAN

Except for a brief issue of Seleucid tetradrachms under Antiochus Hierax, a few bronzes of the second and first centuries B.C. and imperial issues, the coinage of the city of Scepsis in the Troad is traditionally believed to have come to an end in 310 B.C.¹ At that time the inhabitants of the city were removed by Antigonus to participate along with the towns of Larissa, Colone, Cebren, Hamaxitus and Neandria in the synoecism connected with the founding of Antigoneia, the later Alexandria Troas.²

The exile of the Scepsians, however, proved temporary. Lysimachus gave the city a new lease on life when he allowed the inhabitants to return to their former home.<sup>3</sup> Henceforth, Scepsis was occupied for many centuries and became an important cultural center. Natives



<sup>&</sup>lt;sup>1</sup> For example, BMCTroas, p. xxiii-xxiv; SNGCopTroas 469-92; WSM, pp. 346-47. My thanks goes to Jeffrey Spier for introducing me to the coinage of Scepsis. Sallie Fried, Arthur Houghton, Hyla Troxel and Nancy Waggoner read drafts of this paper and provided vital comments. Material was graciously supplied by H. Nicolet (Paris), M. Price (London) and Eric McFadden (NFA). The ANS staff has been consistently helpful.

<sup>&</sup>lt;sup>2</sup> Strab. 13.1.47, 13.1.32, 13.1.33.

<sup>&</sup>lt;sup>3</sup> Strab. 13.1.52.

of the city in hellenistic times included the geographer and Homeric commentator Demetrius, who was an important source for Strabo, and the philosopher Metrodorus, an associate of Mithradates.<sup>4</sup> Louis Robert has collected the epigraphical documents relating to the refounded city, which provide evidence for a rich civic life.<sup>5</sup> Also, the physical layout of the town may have been impressive. Our evidence, unfortunately, is meager. An English traveler, Dr. E. D. Clarke, in 1801 recorded "very remarkable ruins" at Scepsis which, in his judgment, were both Greek and Roman. By 1819 when Barker Webb visited the city, the site was all but destroyed.<sup>6</sup> In this context, the lack of coinage in both precious and base metals from the third century to 188 B.C., when (according to Strabo) Scepsis became subject to Pergamum is somewhat surprising.

A. R. Bellinger in his publication of the coins found at Troy credited the dearth of coinage starting in the early third century at Scepsis and at other smaller cities in the Troad to the dominance of the mints of Alexandria and Ilium, cities capable of supplying the bulk of the region's coinage. It should be noted, for example, that while Lysimachus established a royal mint after 297 at Alexandria Troas, he did not do so at Scepsis despite being instrumental in the refounding of that city. Nevertheless, there is evidence for mint activity in the third century at other cities of the Troad apart from the major centers of Alexandria and Ilium. Of particular interest is the minting of bronzes in the third century by two of the other cities, Cebren and Larissa, whose inhabitants were removed along with those of Scepsis to take part in the founding of Antigoneia in 310.

It is through numismatic evidence, in fact, that we know of the reestablishment of Cebren and Larissa. In both cases, the cities struck



<sup>&</sup>lt;sup>4</sup> W. Leaf, Strabo on the Troad (Cambridge, 1923), pp. 280-84, and "Skepsis," Anatolian Studies Presented to Sir W. M. Ramsay (1923), pp. 280-81.

<sup>&</sup>lt;sup>5</sup> L. Robert, Études de Numismatique grecque (Paris, 1951), pp. 14-15 and more recently, see J. and L. Robert, "Bulletin Épigraphique," *REG* 1972, nos. 371-72 and 1976, nos. 572-73.

<sup>&</sup>lt;sup>6</sup> Leaf (above, n. 4), pp. 271-72.

<sup>&</sup>lt;sup>7</sup> A. R. Bellinger, Troy. The Coins (Princeton ,1961), p. 190.

<sup>&</sup>lt;sup>8</sup> M. Thompson, "The Mints of Lysimachus," Essays Robinson, p. 166.

<sup>&</sup>lt;sup>9</sup> Bellinger (above, n. 7), pp. 190-91.

coinages with a new city name which must have been taken in honor of their respective benefactors, both of whom could only have been active after the synoecism of 310. Bronze coins inscribed ANTIOXEΩN were first identified by Imhoof-Blumer as being struck at Cebren. Robert has suggested that the letters BK on some of the coins of Antiochia indicate that the city of Birytis was joined with Cebren in this new foundation. Cebren taking the name Antiocheia must surely indicate that it was founded at the earliest by Antiochus I. More recently, Robert has established that an issue of coins from a city called Ptolemais were struck at Larissa. Robert suggests the reign of Ptolemy Euergetes III as the proper context for this restoration. Both cities, it is worth noting, are also known from an inscription found at Delphi dated some time in the late third or early second century (before 188) by their former names.

Robert in his writings on the coinage of the Troad has highlighted a tension during the third and early second centuries between a movement to consolidate the area and a desire for local autonomy. Alexandria Troas is the best known example of this tendency to concentrate settlement, but there are others. Lysimachus is reported by Strabo to have incorporated into Ilium the cities in the neighboring area, places unfortunately not identified. Later after Apamea, Ilium had the two smaller cities of Rhoeteium and Gergis added to it by the Romans. 16

We know that the citizens of Scepsis preferred independence. Strabo tells us that the natives of that city were granted permission to return to their former home by Lysimachus. But as mentioned above, numismatic evidence has shown that they were not alone; citizens of Cebren and Larissa must also have broken away from Alexandria. In the light of these discoveries, it remains to be seen if a reexamination of the



<sup>&</sup>lt;sup>10</sup> F. Imhoof-Blumer, "Griechische Münzen in dem Königlichen Münzkabinet im Haag und in anderen Sammlungen," ZfN 1876, pp. 305–10.

<sup>11</sup> Robert (above, n. 5), pp. 25-31.

<sup>12</sup> Robert, "Documents d'Asie Mineure," BCH 1982, pp. 319-33.

<sup>13</sup> Robert (above, n. 12), pp. 327-30.

<sup>14</sup> Robert (above, n. 5), pp. 33-34.

<sup>15</sup> For example, Robert (above, n. 5), pp. 34-36.

<sup>16</sup> Robert (above, n. 5), pp. 9-10.

coinage of Scepsis provides any further evidence of this striving for local autonomy. One might expect a desire for independence to be coupled with a city's desire to mint its own money.

With Scepsis, we are not aided by a name change as in the case of Cebren and Larissa. There is no hoard or excavation evidence that is decisive. One coinage, although not autonomous, deserves mention. Newell has identified an issue of tetradrachms of Antiochus Hierax which he believes was minted at Scepsis. The series must have been brief as it has only one known obverse die and two reverse dies. The basis for the identification is the presence on the reverse of a subsidiary symbol which also marks the obverse type of autonomous coins of Scepsis, a rhyton in the shape of the forepart of a winged horse.<sup>17</sup> If this identification is correct, then we have the recurrence of a symbol of Scepsis on coins at least 65 years after the last dated issue of the mint. We do not know what motivated Hierax to undertake this shortlived coinage at Scepsis. His decision, however, leads one to believe that there was a mint infrastructure in existence at Scepsis prior to the striking of tetradrachms. Perhaps some bronzes traditionally dated to before 310 belong to the third century.

It is to the silver coins rather than the bronzes, however, that we should turn for evidence. There is one issue of silver that, we believe, can be firmly placed after the refoundation of the city. The issue consists of two denominations, a hemidrachm and a quarter drachm (trihemiobol). Based upon a survey of published collections and auction catalogues, five specimens are known to have survived. These pieces can be distinguished by four different characteristics from the other silver coinage of Scepsis dated in the standard references to before 310.

- 1. A bead-and-reel border (fillet) around both obverse and reverse.
- 2. A weight on a different standard from the known silver with one exception which will be discussed later.
- 3. A different form of inscription:  $\Sigma KHY$  contained within the border on the reverse enclosing the pine tree.
- 4. A star located under the pegasus-rhyton on the quarter drachm and on one of the two known hemidrachms and the possible presence of a thyrsus on the reverse of the other specimen.



<sup>17</sup> WSM, pp. 346-47.

Both denominations of this series are known only from private collections. The hemidrachm first appeared in a 1980 auction with a second more distinguishable specimen turning up in commerce in 1982: it is hitherto unpublished. The best preserved specimen of the quarter drachm, however, has a long history. It was first seen in a 1909 Sotheby catalogue of the Benson sale and went from there to the Jameson and, more recently, von Aulock collections. The coins are as follows:

#### LATE THIRD - EARLY SECOND CENTURY B.C.

Obv. Rhyton in form of forepart of winged horse; below, eight-pointed star; bead-and-reel (fillet) border.

Rev. **SKHY** Pine tree; square bead-and-reel border.

#### Hemidrachms

a1-p1 2.45. Private U.S. Coll. Plate 3, 1.

a2-p2 2.42. Obv. the border may be dotted; rev. the inscription is Σ(K)HΨ; to 1., outside of border, a thyrsus (?); to r., outside of border, the inscription may continue with the letter iota. There is surface corrosion on both sides of the coin making precision difficult. NFA 9, 10 Dec. 1980, 245. Plate 3, 2.

#### Quarter drachms (trihemiobols)

ai-pi 1.22. SNGvAulock 7644; Jameson 1458.

ai-pi 1.24. Lanz 24, 25 Apr. 1983 = J. Schulman, 26 Apr. 1976, 5144. Plate 3, 3.

ai-pi 1.20. Cahn 60, 2 July 1928, 796.

It is surprising to find a bead-and-reel border on a silver coin of Scepsis. A fillet border like this is usually considered an innovation of the important mint at Antioch during the reign of Antiochus III (223–187). The design enjoyed wide popularity after his reign and can be seen on coins of Bactria, Parthia and the Saka rulers of India. While never popular on Greek coins (with the exception of Scepsis, we know of no other example), the bead and reel can be found on coins of Repub-



lican Rome. Its earliest use there was as a border circling the head of Apollo on denarii of L. Piso Frugi in 90 B.C.<sup>18</sup>

Newell followed Babelon in associating this pattern with Apollo, the divinity from whom the Seleucid monarchs claimed descent. The fillet has a double significance for the figures encircled within it. It expresses both divine protection and the divine right to rule, a useful design in an age of rebellion.<sup>19</sup> This may well be overstating the importance of a common decorative pattern found frequently in architecture; but it should be noted that the coins of Scepsis are exceptional in that the type is neither a human figure nor a god within the border, but the city's emblem.

If the traditional date of 310 is correct for the end of silver coinage at Scepsis, then we must attribute the innovation of applying a bead-and-reel border to that mint, not Antioch. The practiced die engravers of Antioch would either have independently developed it or been inspired by a 90 year old fraction of Scepsis! This is difficult to conceive. What motivation would the die cutters of Scepsis have had for making this change? There is not even a good esthetic reason. The bead and reel is a heavy border to apply to a small fraction. It is much better suited to the large flans of the Seleucid tetradrachms. Such coins certainly circulated in the Troad and tetradrachms with a bead-and-reel border were minted at Sardes after Antiochus recaptured the city from Achaeus in 215/213.20 It is of course impossible to prove that the Scepsis die cutters were influenced by the tetradrachms of Antiochus III, but it is certainly the most plausible of the alternatives available.

The weight of our silver fractions also points to the special nature of this series within the coinage of Scepsis. No other coins of the city that have come to our attention are close in weight to the 2.42-2.45 of the hemidrachms. It may be worthwhile, at this point, to record the other known silver coins from Scepsis with the rhyton obverse. These coins survive in one issue of two denominations. While rare the



<sup>&</sup>lt;sup>18</sup> WSM, pp. 138-39.

<sup>&</sup>lt;sup>19</sup> WSM, p. 139.

<sup>&</sup>lt;sup>20</sup> WSM, pp. 375-77, and O. Mørkholm "Some Seleucid Coins from the Mint of Sardes," NNÅ 1969, pp. 15-19.

coins are well known. This series is considered in the standard references as the final autonomous silver coins struck at the mint. (There are earlier silver issues having as an obverse either the forepart of a horse or a pegasus but these do not concern us here.)<sup>21</sup> The coins are as follows:

#### FOURTH CENTURY B.C.

Obv. Rhyton in form of forepart of winged horse.

Rev.  $\Sigma KHYI\Omega V$  Pine tree in linear square; to l., crab, to r.,  $\bigstar$ ; traces of incuse square.

#### **Drachms**

a1-p1 3.17. BMC 8.

a1-p1 2.99. SNGCop 472.

a1-p1 3.58. Egger 46, 1914, 687.

a1-p1 3.60. ANS(Kelley). Plate 3, 4.

a1-p1 Alex Malloy 16, 7 July 1980, 81.

Obv. Rhyton in form of forepart of winged horse.

Rev.  $\Sigma KHYI\Omega V$  Pine tree in linear square; to l., A to r. K.

#### Hemidrachms

ai-pi 1.80. Traité 2357.

ai-pi 1.63. MonnGr 189.

Judging from the weights, these coins were minted on the Rhodian (Chian) scale. This was the most common standard in use in western Asia Minor in the fourth century B.C.<sup>22</sup> While it is possible that the coins with the bead-and-reel border are tetrobols and diobols based upon the same standard, they would be on the heavy side. Moreover, given the limited size of the mint's issues, it does not seem likely that four denominations so close in weight would have been struck simultaneously. Instead the bead-and-reel coins are of a separate series and may best be considered hemidrachms and quarter drachms, minted perhaps on the Persic standard. This scale was widely used in the Hel-



<sup>21</sup> Traité, vol. 2, pt. 2, pp. 1287-94.

<sup>&</sup>lt;sup>22</sup> C. Kraay, *ACGC*, p. 247.

lespont region superseding the Rhodian standard in the mid to late fourth century B.C. and was, it seems, the standard used again ca. 245–200 at Byzantium and Calchedon for a series of drachms weighing between 4.6 g and 5.4 g.<sup>23</sup> On a chronological basis, the hemidrachms from Scepsis on the Persic scale seem related to an issue of fractions from Alexandria Troas and Ilium. Bellinger, who also considers these coins as hemidrachms, dates them to the period following the death of Antiochus Hierax (228). The Alexandria issue consists of two specimens with weights of 2.35 g and 2.41 g. The Ilium specimens are lighter; leaving aside a plated coin, the three recorded pieces range between 2.09 g and 2.33 g.<sup>24</sup>

It is difficult to adduce the economic factors involved in the choice of standard for this series. As we are dealing with a small issue, it need not have been minted with an eye toward international commerce.

There is one other silver coin that should be mentioned here; it appears to belong to neither of the two issues discussed above:

#### MID TO LATE THIRD CENTURY B.C.?

Obv. Rhyton in the form of forepart of winged horse in a circle. Rev.  $\Sigma$ KH Pine tree; beaded square border enclosing tree between  $\Sigma$ K; outside of square, to r., H; to l., an ear of grain with two leaves.

a1-p1 1.22 g MonnGr 190 (The coin is unfortunately not illustrated).

The weight of this coin is the same as the quarter drachms of the bead-and-reel issue. The absence of this border and the shorter form of inscription (see further below), however, makes a slightly earlier date probable. Perhaps the coin is contemporary with the autonomous silver of Alexandria and Ilium discussed above. This would then place it between the fall of Hierax (228) and the beginning of the reign of Antiochus III in 223. Such precision, however, may be unwarranted.



<sup>23</sup> G. Le Rider, "Sur le Monnayage de Byzance au 1ve siècle," RN 1971, pp. 152-53.

<sup>&</sup>lt;sup>24</sup> Bellinger (above, n. 7), pp. 21-22 and 91-93. See also H. Seyrig, "Statères d'Or Pseudalexandrins," RN 1969, pp. 36-39.

To summarize, there appear to be four separate issues of silver coins at Scepsis with the rhyton symbol. The first, as we have seen, was struck on the Rhodian scale and can be dated prior to the founding of Antigoneia in 310. The second issue is not autonomous but consists of a brief striking of Seleucid tetradrachms by Antiochus Hierax (246–228/7). The third issue consists of only one specimen. Its dating is the most nebulous of the four. It has been suggested that the period shortly after the fall of Hierax may be appropriate. Finally there is the issue with the bead-and-reel borders. The use of this device suggests a date between the beginning of the reign of Antiochus III and the Peace of Apamea (223–188). A discussion of the historical context may allow us to place this issue even more exactly.

First, however, it remains to consider two of the other aspects of the bead-and-reel issue: the form of inscription and the star under the rhyton. These two features provide important links to the bronze coinage of the city. A catalogue of the bronzes of Scepsis, however, is beyond the scope of this essay. Nevertheless, stylistic comparisons with selected pieces may prove fruitful.

The four letter inscription  $\Sigma$ KHY found on the bead-and-reel issue does not exist on any other coins of the city, bronze or silver. Normally one expects inscriptions to increase in length with time.<sup>25</sup> With Scepsis this is not the case. The silver issue struck on the Rhodian scale with the rhyton obverse, discussed above, has the full city name inscribed around the reverse. The earlier silver coins of the mint also display the full legend of the city, although in their case it is around the obverse (Plate 3, 6 [MFA 1636]).

The bronzes with the rhyton obverse, however, have only an abbreviated inscription, either a  $\Sigma K$  or a  $\Sigma KH$ . The legend is placed on the reverse of the coins along with the pine tree. In addition, a wide variety of subsidiary symbols (e.g. ear of grain, thyrsus, cantharus, star, bucranium, etc.) is found on the reverses of many of the pieces. The bronze coins which have the shorter, two letter inscription are found in some cases without subsidiary symbols leading one to conclude



<sup>25</sup> ACGC, p. 247.

For a selection see  $Traité\ 2358-75$ . Also it should be noted that at least one small bronze coin exists with a rhyton obverse and no inscription at all  $(BMC\ 9)$ .

that the  $\Sigma K$  legend is earlier<sup>27</sup> (Plate 3, 8 [ANS]). The coins which have reverses with the thyrsus, star and other secondary types tend to have an extra letter, H added to the inscription<sup>28</sup> (Plate 3, 5 [ANS].) The letters, as with the autonomous silver coins we have dated to the third century, are placed on either side of the pine. When the H is added, it is rather crudely placed just outside the square border enclosing the pine. This corresponds to the unique quarter drachm without the bead-and-reel border described above.

We began this discussion by saying that Scepsis did not follow the usual pattern of moving to longer and longer inscriptions. This may not be entirely accurate. The earliest silver coins certainly have the fullest inscription; but a separate development exists. It begins with the bronzes having only the  $\Sigma K$  on either side of the pine (Plate 3, 8), and then progresses with the addition of a third letter H rather awkwardly placed outside the border enclosing the pine (Plate 3, 5) and finally ends with a return to symmetry by the addition on the silver bead-and-reel fractions of a fourth letter  $\Psi$ , with all the letters neatly (if tightly) enclosed within the border (Plate 3, 1). If the line visible on the reverse of the second hemidrachm of the bead-and-reel series (Plate 3, 2) is indeed an iota, then this might represent yet a further development.

The presence of a star under the pegasus on one of the hemidrachms and the quarter drachms of the issue with the bead-and-reel border is, as mentioned above, another of its distinguishing characteristics. We need not venture any hypothesis as to its meaning. But the star provides an additional link to the bronze coinages. One bronze with a rhyton obverse and a  $\Sigma$ KH legend in Paris has a similarly located star (Plate 3, 7).<sup>29</sup> The star, as noted earlier, is one of the subsidiary symbols that appear on the reverse of some of the bronzes from Scepsis; on one group it is accompanied by a thyrsus (Plate 3, 5). This thyrsus may be similar to the symbol faintly visible on the reverse of the second hemidrachm of the bead-and-reel issue.

Given the similarities and the apparent continuity between the bronzes and the silver fractions we have examined, it becomes tempting



<sup>&</sup>lt;sup>27</sup> E.g. Traité 2362, BMC 15.

<sup>28</sup> E.g. Traité 2364.

<sup>29</sup> Traité 2360.

to bring down the date of some of the bronze coinage. The change to a shorter legend may perhaps be ascribed to the break in the mint caused by the removal of the population in 310 and their return in the early third century. If this is correct then the bulk of Scepsis's bronze coinage should be dated to the third rather than fourth century. This leaves to the pre-310 mint only the production of a group of small bronzes with the forepart of a pegasus, not a rhyton, on the obverse. The coins have no inscription and traces of an incuse square are visible (Plate 3, 9 [ANS]). Coins of the same size are found with the rhyton obverse and the two and three letter abbreviations making it very likely that the pegasus coins are an earlier issue. A fourth century date for them, therefore, seems reasonable.<sup>30</sup>

Until a full study of the bronzes is undertaken, however, it is best not to be too certain in dating the coins. If we are right in putting the silver coins with the bead-and-reel borders in the reign of Antiochus III, then we have reason to believe that some at least of the bronze coins of Scepsis were struck after the city's refoundation. Perhaps mint activity was steady throughout the third century. This would also help explain the choice of Hierax to mint tetradrachms at the city, as well as the striking of the issue represented by the lone silver quarter drachm with the  $\Sigma KH$  legend. It remains to be seen if the historical context would support the attribution of the bead-and-reel coins to the reign of Antiochus III.

Although Antiochus III came to the throne in 223, his influence did not immediately extend to western Asia Minor. Power rested initially in the hands of Achaeus who, first as a servant of the government and then as an usurper, waged war against Attalus. In this endeavor he was initially successful recovering all the ground lost since the Third Syrian War with the exception of Alexandria Troas, Ilium and Lampsacus, cities which Polybius (5.78.6) says were loyal to Attalus. Antiochus III did not turn his attention to Asia Minor until 216. At that time, he reached an understanding with Attalus to allow for a joint campaign against the usurper Achaeus (Polyb. 5.107.4). That endeavor was successfully terminated with the capture and death of Achaeus in 213.



<sup>&</sup>lt;sup>30</sup> For the pegasus bronzes, see e.g. BMC 7. For the rhyton obverse on coins of a similar size see e.g. BMC 8 and 15.

Antiochus, while regaining Sardis, did not recover the Troad which was one of the areas that remained in the hands of Attalus due perhaps to the understanding reached with Antiochus in 216.<sup>31</sup>

The years 213-199 are obscure in the Troad. Pergamum loosely controlled the region. One may imagine that Alexandria and Ilium, given their loyalty to Attalus in the war against Achaeus in the period before 220, would have been the dominant local power. This would not be the proper context for the issuance of the silver coins we are examining at Scepsis, whether such an issue implies full autonomy or not. The bead-and-reel border, given the recent introduction of the design and the political and religious implications of it (however minor) described above, could not have been looked upon favorably by either Scepsis's Pergamene overlords or its powerful local neighbors.

The situation changes drastically, however, in 198.<sup>32</sup> Antiochus III launched an attack against the Pergamene kingdom. By the fall of 197, Ilium appears to have come under Antiochus's control,<sup>33</sup> presumably Scepsis was his as well.<sup>34</sup> The return of Seleucid power was not greeted favorably by the most powerful city of the Troad, Alexandria. The city appears (Livy 35.42.2) in 192 along with Smyrna and Lampsacus resisting Antiochus. Alexandria must previously have been taken and this represents a revolt.<sup>35</sup>

For cities such as Alexandria, Ilium and Lampsacus, Pergamum may have been a more attractive alternative than the return of Seleucid control. There must have been a good deal of local autonomy associated with allegiance to the Attalids. Alexandria appears to have celebrated its liberation from Seleucid control after the fall of Hierax with an issue of autonomous gold staters.<sup>36</sup>

A city like Scepsis, however, may have had more to gain than lose from the reassertion of control by a major power over the Troad. There is reason to think that relations between Scepsis and Alexandria were



<sup>31</sup> H. H. Schmitt, Untersuchungen zur Geschichte Antiochos' des Grossen und seiner Zeit (Wiesbaden, 1964), pp. 264-67.

<sup>32</sup> Livy 32.8 and Schmitt (above, n. 31), pp. 269-70.

<sup>33</sup> Schmitt (above, n. 31), p. 293.

<sup>34</sup> Schmitt, p. 283.

<sup>35</sup> Schmitt, p. 284.

<sup>36</sup> Bellinger (above, n. 7), pp. 21-22 and pp. 91-93; H. Seyrig (above, n. 24).

marked by a certain rivalry. Scepsis, of course, was refounded when its native citizens were permitted to withdraw from Alexandria. Demetrius of Scepsis made some disparaging remarks about Ilium which are recorded by Strabo. Alexandria, despite its importance, is barely mentioned in Strabo's book on the Troad. Here too, Demetrius, Strabo's main source, may be responsible.<sup>37</sup>

Scepsis did not become a free city after the Peace of Apamea in 188. Instead, we know from Strabo that the city was turned over to Pergamum.38 Other cities in the Troad faired better. Alexandria became a free city as did Ilium and Dardanus. Livy reports (38.39) that cities which had taken the side of the Roman people were exempted from tribute while supporters of Antiochus or tributaries of Attalus were ordered to pay tribute to Eumenes. Ilium and Dardanus, Livy adds, owed their favorable treatment to their connection with Rome's origin rather than for any recent services. Scepsis too claimed a relation to Aeneas. Strabo reports stories of Scepsis's origin.40 One has it being founded by Scamandrius the son of Hector and Ascanius the son of Aeneas. Demetrius claimed Scepsis as the royal residence of Aeneas. Whatever the connection, it did not help Scepsis in the settlement after Apamea. Perhaps the city could not gloss over its record of collaboration. Scepsis may well have welcomed the coming of Antiochus and cooperated fully; no succor was to be expected from the Romans. Allegiance to the great king may have been less onerous for Scepsis than economic and political domination by Alexandria.

Antiochus, as expressed by his dealings with Smyrna and Lampsacus and his remarks at the conference of Lysimachia, seems to have used a conciliatory policy in dealing with the Greek cities of western Asia Minor.<sup>41</sup> He was not adverse to granting favors and privileges provided his position was recognized. The striking of silver fractions by Scepsis, especially since they bore the Seleucid bead-and-reel, should not be taken as a hostile act of sovereignty.<sup>42</sup> More likely Antiochus granted



<sup>&</sup>lt;sup>37</sup> Leaf (above, n. 4), pp. xxvii-xlvii.

<sup>38</sup> Strab. 13.1.54.

<sup>39</sup> Schmitt (above, n. 31), p. 284.

<sup>40</sup> Strab. 13.1.52-53.

<sup>41</sup> Livy 33.38 and Polyb. 18.49-51.

<sup>42</sup> See the remark by H. Seyrig quoted in Bellinger (above, n. 7), p. 21, n. 9.

the city permission to coin, perhaps as a reward for its quick submission. It is to this period then, 197-188, that we should date the five silver coins from Scepsis under discussion.<sup>43</sup>

In conclusion, there is good reason to believe that the mint of Scepsis was active in the third and early second century. While we have no firm dates for any of the bronze coinages, it is possible that at least some if not all of the specimens with the rhyton date after the refoundation of the city by Lysimachus. We can be more specific about one issue of silver coins. The bead-and-reel border that appears upon them makes a date between 197 and 188 likely. This issue is not only important for our understanding of the history of the mint of Scepsis, but is a valuable piece of information for our understanding of the relations between Antiochus III and the Greek cities of western Asia Minor at a critical period in history.

<sup>43</sup> An inscription has recently come to light from Scepsis mentioning a festival called Antiochia. P. Frisch and Z. Taslikioglu ("Inscriptions from the Troad," ZPE 19 [1975], p. 219) suggest on the basis of style a date of 200 B.C. and therefore feel that the sovereign being honored was Antiochus III and the proper date sometime during Seleucid control of Scepsis 197-188. The inscription may be connected with an important document found at Teos recording honors paid to Antiochus III and Laodice that can be dated to 204/3. (See E. Lanzillotta, "Un Epigrafe di Scepsis dell'Inizio del 11 Sec. A.C.," Scritti Zambelli 1978, pp. 207-13.) If the Scepsis inscription does refer to Antiochus III then it would provide an interesting link with our coins. It should be noted, however, that J. and L. Robert feel that the honored monarch was much more likely Antiochus I or II (see "Bulletin Épigraphique," REG 1976, no. 573). They point out that the Antiochus who reestablished Cebren and Birytis under the name Antiochia would, due to his activity in the region, have been the likely monarch to be honored by a festival at Scepsis. J. and L. Robert may be correct but Cebren was the ancestral enemy of Scepsis (Strab. 13.1.3); Cebren's reestablishment could hardly have pleased the Scepsians. Regardless of the correct date, the inscription is not crucial to the numismatic argument. The bead-and-reel is still our best evidence for applying a date to the coins.



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### A COIN WITH THE ARAMAIC LEGEND ŠHRW, A KING-GOVERNOR OF LIḤYÂN

MARTIN A. RIZACK

The following silver coin has recently been added to the cabinet of the American Numismatic Society:

Obv. Head of youth l., nose and chin off flan.

Rev. 7471 , A $\Theta$ E (retrograde); to r., owl standing l.  $\downarrow$  0.48 g. (Illustrated here actual size and 4x).







The coin's provenance is uncertain, but it was probably found somewhere in Israel. Eventually it was sold to an American dealer and placed on auction.<sup>2</sup>

The word ŠHRW, in Aramaic script, is related to the root ŠHR (moon crescent). It is the name of two different rulers recorded in inscriptions. ŠHRW I³ was the father of Geshem the Arab or Gashmu (mentioned in the Bible),⁴ while ŠHRW II, mentioned in a Liḥyânic inscription found north of ancient Dedan (modern al-'Ula),⁵ was the father of Hani'ôs I, king of Liḥyân,⁶ an ancient kingdom in the northern Hejaz region of Arabia.

The Geshem mentioned in the Bible was a contemporary of Nehemia, who lived during the last half of the fifth century B.C.<sup>7</sup> His successor, Qaynu, ca. 400, was followed by ŠHRW II, father of Hani'os I. ŠHRW II, who appears to be the ruler whose name is inscribed on this coin, and his son flourished during the first half of the fourth century.

# THE ENGRAVING

The paleography of the Aramaic legend suggests that the coin was produced in the early or middle fourth century. The engraving of the legend, however, caused the artisan some problems. The initial S is retrograde. The H and R are in correct position, but the final W appears

- 1 It has been suggested that the coin might have been part of The Nablus hoard (IGCH 1504). Those currently working with the hoard, however, believe this to be unlikely. The guidance of L. Mildenberg was most valuable. I am grateful to F. M. Cross for identifying the legend and dating it paleographically to the early or mid-fourth century. S. Hurter, J. Naveh, A. Spaer, M. Thompson and N. Waggoner provided helpful suggestions. The libraries of the ANS and Columbia University and their librarians made important contributions to the documentation of this report.
  - <sup>2</sup> Biblical Numismatic Society (Mail Bid Sale no. 3), Summer 1980, 3.
- <sup>3</sup> A. Janssen and R. Savignac, Mission Archéologique en Arabie (Paris, 1914), no. 349.
  - 4 Geshem is mentioned in Nehemia 2.19, 6.1 and 6.2; Gashmu in 6.6.
  - <sup>5</sup> I am indebted to F. M. Cross for this identification.
  - <sup>6</sup> Janssen and Savignac (above, n. 3), no. 53.
- <sup>7</sup> W. F. Albright, "The Date and Personality of the Chronicler," Journal of Biblical Literature 40 (1942), pp. 104-24.



to have been engraved over a Y. The Greek legend AOE is retrograde. The representation of the owl's breast and wing feathers by coarse stippling, the lack of musculature and awkward position of the right leg, and the mere outline of the beak, make for a primitive though unmistakable appearance. The incuse square and olive branch usually associated with the owl are lacking here, as on some fourth century Athenian fractional coinage.<sup>8</sup> The obverse head, which resembles that of a Cilician coin in the Ashmolean Museum, is well done.<sup>9</sup> Both obverse and reverse figures face left in contrast to the prototype, indicating the inexperience of the engraver in preparing dies in reverse.

The owl in various forms appears on fractional coinage found in Palestine dating from the middle of the fourth century. Most of these coins bear the inscription AOE and some mark indicating a locality. Some coins, usually of later date, have the name, in Aramaic letters, of a Persian governor. A double inscription, as appears on this coin, is unusual. In Arabia Felix copies of the Athenian fourth century owl reverse appear commonly on coinage only in the third century.

#### HISTORICAL NOTES

Liḥyân was on the ancient caravan route between Arabia and the fertile crescent.<sup>13</sup> There may have been trade between Liḥyân and ancient Palestine, which would account for the coin being found in modern Israel, but there is no direct evidence for this. Although it may have been under direct Persian control earlier, Arabia by the fourth century was not part of a Persian satrapy, though it could be considered a Persian protectorate.<sup>14</sup> An Aramaic inscription of the name of a local



<sup>&</sup>lt;sup>8</sup> BMCAttica, p. 139, 8.

<sup>9</sup> ACGC, pl. 59, 1029.

<sup>10</sup> SNGANSPalestine-South Arabia 3-10.

<sup>&</sup>lt;sup>11</sup> L. Mildenberg, "Yehud: A Preliminary Study of the Provincial Coinage of Judea," Essays Thompson, pp. 183-96.

<sup>12</sup> SNGANS Palestine-South Arabia 1455-61; BMCArabia, pl. 7, 3-24, and 27-29; pl. 11, 24-26.

<sup>18</sup> I. Eph'al, The Ancient Arabs (Jerusalem, 1982), p. 241.

<sup>14</sup> CAH 4, p. 195 (Gray and Cary).

ruler on fractional coinage is consistent with the practice of the Persian Empire.<sup>15</sup> The form of the titles in the Liḥyânic inscriptions discussed above has been thought to indicate Persian influence;<sup>16</sup> the use of Aramaic to inscribe the ruler's name on the coinage confirms this impression.

The key point in the dating of the kings of Liḥyân is the association of Gashmu of Liḥyân with the Geshem mentioned in the Book of Nehemia. Gashmu of Liḥyân is thought to be the same as Geshem the father of Qaynu, king of Qedar, mentioned in the inscription on a silver bowl in the Brooklyn Museum, found at Tell el-Maskhuteh, which has been dated on archaeological and paleographic grounds to the second half of the fifth century.<sup>17</sup> It has been assumed that Qedar, an area of Arabia closer to Palestine, encompassed Liḥyân at that time, though this conclusion has been questioned.<sup>18</sup>

The name SHRW appears as a graffito on a coin of Alexander found in a hoard at Tel Tsippor, Israel. This has been presumed to have been scratched on the coin by a Nabataean merchant travelling with a caravan, to identify it as his property. Coinage bearing the name of a ruler named SHRW or attributed to Lihyan, has not been previously reported.

<sup>15</sup> Mildenberg (above, n. 11), pp. 184-88.

<sup>&</sup>lt;sup>16</sup> Eph'al (above, n. 13), p. 212.

<sup>17</sup> I. Rabinowitz, "An Aramaic Inscription of the 5th Century B.C.E. from a North-Arab Shrine in Egypt," Journal of Near Eastern Studies 15 (1956), pp. 1-9.

<sup>&</sup>lt;sup>18</sup> Eph'al (above, n. 13), p. 213.

<sup>&</sup>lt;sup>19</sup> L. Y. Rahmani, "A Hoard of Alexander Coins from Tel Tsippor," SM 64 (1966), pp. 132, Graffito 5.

# THE CHRONOLOGY OF THE NEW STYLE COINAGE OF ATHENS

OTTO MØRKHOLM

#### INTRODUCTION

It is hardly an exaggeration to say that the most intensely discussed problem in hellenistic numismatics during nearly a quarter of a century has been the chronology of the Athenian new style silver coinage. In 1961 Margaret Thompson published her magnificent study of this series. She arranged 109 issues in a tight chronological sequence from

ED. NOTE: Of the many numismatic studies that we owe to the keen perception and wisdom of Otto Mørkholm, the above article is perhaps one of the most important. Written shortly before his tragic death, in connection with his book on hellenistic coinages, it presents for the first time a balanced analysis of the controversial chronology, taking into account all pertinent factors: the overstrikes, the testimony of both early and late hoards and the historical evidence. The author's conclusions seem to me so valid that I hope the controversy can now be considered at an end. Margaret Thompson.

<sup>1</sup> M. Thompson, The New Style Silver Coinage of Athens, ANSNS 10 (New York, 1961); hereafter cited Thompson, Athens. For summaries of the discussion see the Surveys of Numismatic Research published on the occasion of the international numismatic congresses: C. M. Kraay, "Mainland Greece and Asia Minor," 1960–1965 (1967), pp. 37–38; T. Hackens, "La Grèce, les regions balkans et le littoral septentrional du Pont Euxin," 1966–1971 (1973) 1, p. 123; O. Mørkholm, "Greece to India," 1972-1977 (1979) 1, pp. 69–71.



196/5 to 88/7 B.C.<sup>2</sup> Already in 1962 the discussion was opened by D. M. Lewis, who proposed an alternative dating system, beginning in 164/3 and lasting until ca. 50.<sup>3</sup> Since then most contributions to the discussion have extolled the merits of the low chronology, especially as regards the last part of the series. Margaret Thompson, however, has defended her high chronology with arguments that in my opinion have not been satisfactorily answered.<sup>4</sup> Consequently, a new survey of the situation may not be superfluous.

It is necessary to examine an axiom put forward by Margaret Thompson and accepted by her opponents with only slight modifications. This is the conception of the series as a continuous, annual, sequence without any gaps. Such may well be the case with the larger part of the series, where the material is abundant and die links between the issues quite frequent. But both at the beginning and at the end of the series the number of specimens and dies is much smaller, and I can see no compelling reason to regard them as absolutely continuous. Irregular gaps may well occur and should be accepted if other considerations make them likely.

Since the initial publication, one new issue has made its appearance.<sup>7</sup> The issue of King Mithradates and Aristion, regarded by Margaret Thompson as a special emission, has been assigned to a separate year,

- <sup>2</sup> All dates in this paper are B.C.
- <sup>3</sup> D. M. Lewis, "The Chronology of the Athenian New Style Coinage," NC 1962, pp. 275-300.
- <sup>4</sup> M. Thompson's contributions to the discussion are the following: "Athens Again," NC 1962, pp. 301-33; "Ptolemy Philometor and Athens," ANSMN 11 (1964), pp. 119-29; The Agrinion Hoard, ANSNNM 159 (1968), pp. 80-82, 107-9: "Byzantium over Aesillas," RN 1973, pp. 54-65.
- <sup>5</sup> Thompson, Athens, p. 723; Lewis (above, n. 3), p. 275 with note 2; Thompson, "Athens Again", p. 332. C. Boehringer, Zur Chronologie miltelhellenistischer Münzserien 220–160 v. Chr., AMUGS 5 (Berlin, 1972), pp. 22–31 and 200–204, implies an unbroken annual sequence except for a gap of 3–4 years immediately after Sulla's conquest of Athens in 86.
- <sup>6</sup> A parallel can be cited from Ptolemaic Egypt. The large mint of Alexandria produced coins continuously from 122/1 to 89/8 except for one year, 104/3. See O. Mørkholm, "Ptolemaic Coins and Chronology: The Dated Silver Coinage of Alexandria," ANSMN 20 (1975), p. 12.
- <sup>7</sup> M. Caramessini-Oeconomides and F. Kleiner, "The Hierapytna Hoard. A Supplement," RBN 1975, pp. 5-19.



and a third issue (Kointos-Charmostra), which was classified by Miss Thompson among the imitations, has been restored to the ordinary series by some scholars.<sup>8</sup> Thus we are now dealing with a series comprising 111 or 112 issues, but possibly covering a period of considerably more than 112 years.

# THE END OF THE SERIES

# Arguments for the Low Chronology

At the center of the discussion has been the issue signed by King Mithradates and Aristion (no. 78) and with the Pontic symbol, star between two crescents. Closely connected with it is the issue of Apellikon and Gorgias with a griffin symbol (no. 77). This symbol, the badge of the city of Teos in Ionia, indicates that we are dealing with a certain Apellikon from Teos. Aristion had made an earlier appearance in the Athenian new style coinage (no. 68), this time with the symbol, drinking Pegasos standing to left with head lowered and one foreleg raised, exactly the same position which is adopted on some of the silver coins of Mithradates VI of Pontus. Moreover, both Aristion and Apellikon are known from our literary sources to have been involved in securing Athens as an ally of Mithradates VI in 88–86, during his first war with the Romans which for Athens ended with Sulla's conquest of the city in 86.

The combination of the three names and the Pontic symbols on the coinage as well as their appearance in the literary evidence seems to be more than coincidental. Dating the King Mithradates-Aristion issue to the year 87/6 and using Margaret Thompson's arrangement, with a few modifications suggested by Boehringer, we can derive the following table of the new style silver coinage between 99/8 and 83/2.9

- 8 Thompson, Athens, pp. 464-67, nos. 1427-28; Boehringer, p. 24-27.
- <sup>9</sup> The modifications of Boehringer consist of the introduction of two new issues, nos. 78-79, and a shifting of the Mnaseas-Nestor issue no. 74 to an earlier place in the sequence. C. Habicht, "Zur Geschichte Athens in der Zeit Mithridates' VI," *Chiron* 1976, pp. 137-38, has argued convincingly that there is no need to postulate a break of several years in the coinage just after Sulla. Symbols with political connotations are in italics.



Issue	Date	Magistrates	Symbols	Obv. dies
no.				
66	99/8	Demetrios-Agathippos	caps of	47
	·		Dioscuri	
67	98/7	-Niketes-Dionysios	Gorgon head	33
68	97/6	LAristion-Philon	Pegasos	30
69	96/5	-Aropos-Mnasago	winged Agon	<b>25</b>
70	95/4	Xenokles-Harmoxenos I	serpent	19
71	94/3	Nikogenes-Kallimachos	Hermes	17
72	93/2	-Demeas-Hermokles	Crown of	17
	·		Isis	
73	92/1	LXenokles-Harmoxenos II	dolphin and	42
			trident	
74	91/0?	Mnaseas-Nestor	kernos	10
<b>7</b> 5	90/9	~Xenokles-Harmoxenos III	seated	14
			Roma	
<b>76</b>	89/8	-Kointos-Kleas	Roma and	7
			Nike	
77	88/7	LApellikon-Gorgias	griffin	12
<b>78</b>	87/6	King Mithradates-	star between	3
		Aristion	crescents	
<b>7</b> 9	86/5?	Kointos-Charmostra	two ears of	2
			corn	
80	85/4	Kleophanes-Epithetes	baetyl with	7
			fillets	
81	84/3	┌Mentor-Moschion	Harmodios	8
			and	
			Aristogeiton	
82	83/2	└Architimos-Demetri	Isis	7

This arrangement makes excellent historical sense. Already in his first term (97/6), Aristion reveals his Pontic sympathies by adopting the Pegasos symbol. Issues 75–76 (90/9–89/8) have seated Roma and Roma crowned by Nike respectively as symbols, a clear declaration of pro-Roman sympathy. These were the two years when the eponymous archon Medeios illegally remained in office. Clearly a political struggle between a pro-Roman and a pro-Pontic faction was already



brewing. By 88/7 the Pontic faction got the upper hand, and Athens joined Mithradates VI in his war against Rome. Issue 78 was struck only during the first six months of the Athenian year, that is until ca. January 86. It was accompanied by gold staters, the only new style gold known, and normally considered a sign of economic difficulties. The known specimens are all struck from one pair of dies.

In March 86 Sulla captures Athens. The coins with the name of King Mithradates were presumably recalled as part of his damnatio memoriae, accounting for the very small number known at present. If the Kointos-Charmostra issue is rightly placed, it means that the first year after the conquest saw a very moderate output of coins, all struck during the fourth month of the year, after a break in the silver coinage of nearly ten months. A last symbol with political connotations is the tyrant-slayers Harmodios and Aristogeiton in 84/3. As pointed out by Habicht, their occurrence should be connected with Sulla's stay in Athens on his way home after the final victory over Mithradates, reflecting the gratitude of the pro-Roman faction for the deliverance of the city from the "tyranny" of the Pontic king and his adherents.<sup>10</sup>

It may also be of some interest to examine the quantity of the various issues and the development of their weights. Issues 66–69 were produced in large numbers, but a frequency, table of these issues shows a rather low weight, the peak being at 16.40–16.49 g. The production of issues 70–72 was more moderate, but the peak weight is raised to 16.70–16.79 g. Issues 73–79 show some irregularities. After the very large issue 73, the number of obverse dies for the following issues drops sharply to reach a minimum with issues 78 and 79. At the same time the whole group was struck with very low weights, the peak of the frequency table having moved down to 16.30–16.39 g, the absolute minimum weight within the entire new style series. From issue 80 onward the production is moderate to small, but surprisingly, the



<sup>&</sup>lt;sup>10</sup> Habicht (above, n. 9), pp. 127-35 (damnatio memoriae of Mithradates), and pp. 135-42 (the tyrant-slayers symbol). For the historical setting see also E. Badian, "Rome, Athens and Mithridates," American Journal of Ancient History 1 (1976), pp. 105-28.

weights increased to 16.80-16.89 g, a higher level than any other new style issues except the very first six or seven emissions.<sup>11</sup>

In addition to its intrinsic probability, there are a number of convincing arguments in favor of the low chronology. In the first place, several late hoards make better sense on this dating, whereas the high chronology creates a gap of ca. 30 years between the Athenian coins and other datable elements of the hoards. This is true for two hoards from Attica, the Piraeus and Dipylon hoards, 12 a find from Giresun in northern Turkey, 13 as well as for a number of hoards from Delos. One of these hoards has been examined by Tony Hackens, who clearly explains the difficulties inherent in the high chronology for the historical interpretation of the finds from Delos. 14

Secondly, several scholars analyzing the bronze coinages of late hellenistic Athens have arrived at the conclusion that these coinages provide supporting evidence for the low chronology. An issue with the head of Athena in Corinthian helmet, on the obverse and Zeus striding to right, hurling thunderbolt on the reverse, has a star between two crescents as a symbol, which connects the issue with Mithradates's silver and gold coins. An examination of various hoards and deposits from the Athenian agora has placed this issue firmly at the beginning of the first century, thus vindicating the low chronology.<sup>15</sup>

There can hardly be any doubt that the moneyers of the Athenian new style coinage belonged to the affluent upper class in Athens. It is therefore tempting to try to identify them with other magistrates, priests, members of commissions etc., who are abundantly represented in



<sup>11</sup> Thompson, Athens, pp. 642-48. The frequency tables have been constructed from the abundant material collected by Miss Thompson.

<sup>12</sup> IGCH 337, 339.

<sup>&</sup>lt;sup>18</sup> IGCH 1383. F. S. Kleiner, "The Giresun Hoard," ANSMN 19 (1974), pp. 3-25, esp. pp. 16-17.

<sup>&</sup>lt;sup>14</sup> IGCH 285-86, 290, 292-95, 334-36. T. Hackens," Trésor hellénistique trouvé à Délos en 1964," BCH 1965, pp. 504-34.

<sup>15</sup> M. J. Price, "The New-Style Coinage of Athens: Some Evidence from the Bronze Issues," NC 1964, pp. 27-36; J. H. Kroll, "Two Hoards of First-Century B.C. Athenian Bronze Coins," A Delt 27 (1972), pp. 86-120; F. S. Kleiner, "The 1926 Piraeus Hoard and Athenian Bronze Coinage ca. 86 B.C.," A Delt 28 (1973), pp. 169-86 and "The Agora Excavations and Athenian Bronze Coinage, 200-86 B.C.," Hesperia 45 (1976), pp. 1-40.

our rich epigraphical material. The dangers of this procedure have been pointed out by Margaret Thompson; the Athenian custom of repeating names within the same families is responsible for the ambiguity of prosopographical data. Despite this warning there is, however, one identification within the late issues that seems valid. A certain Diokles appears as first moneyer on three occasions in the late 60s and 50s, according to the low chronology. The first two issues are marked with the symbols Asklepios and Hygeia, the third with a figure of Dionysos. Now a Diokles of Kephisia appears as priest of Asklepios and Hygieia in 51/0. The connection between the two monetary symbols and Diokles's priesthood seems to me more than a coincidence, and if only this single identification is accepted, the low chronology must be correct for the end of the new style coinage. The sum of the symbols and the sum of the new style coinage.

# Objections to the Low Chronology

In light of this overwhelming evidence in favor of the low chronology, the arguments against it must be very strong. As a matter of fact they are. The high chronology is based primarily on two overstrikes that are difficult to accommodate within the low chronology. In the first place, a tetradrachm of the Roman quaestor Aesillas in Macedonia is struck over an Athenian tetradrachm of Demeas-Kallikratides (issue 92; 107/6 on the high chronology, ca. 70 on the low). In the Macedonian coinage Aesillas is linked to two other Roman magistrates: a propraetor Caesar, and a legatus pro quaestore Sura, who was the immediate successor of Aesillas. The latter is mentioned by Plutarch, fighting against Pontic forces in Boeotia in 87 as legate of the provincial governor of Macedonia, C. Sentius. A L. Julius Caesar is known from an inscrip-



<sup>16</sup> Thompson, "Athens Again," pp. 306-8. Compare Lewis (above, n. 3), pp. 286-93. Two contributions by H. B. Mattingly deal mainly with prosopographical questions: "Some Third Magistrates in the Athenian New Style Silver Coinage," *JHS* 1971, pp. 85-93, and "Some Problems in Second Century Attic Prosopography," *Historia* 20 (1971), pp. 26-46.

<sup>&</sup>lt;sup>17</sup> Thompson, Athens pp. 410-11; H. B. Mattingly, review of The Agrinion Hoard, in NC 1969, p. 328; J. H. Kroll (above, n. 15), pp. 93-94; Caramessini-Kleiner (above, n. 7), pp. 18-19.

<sup>18</sup> Plut., Sull. 11. App., Mithr. 29.

tion as governor of Macedonia, but his date is uncertain.<sup>19</sup> Based on these few facts the following sequence of events has been reconstructed: Aesillas was quaestor in Macedonia ca. 94–88. L. Julius Caesar is identified with the consul of 90, whose praetorship must have fallen in 95 and his governorship in Macedonia in 94. A Brettius Sura took over the quaestorial functions in Macedonia, including the issuance of coins, in 87.<sup>20</sup>

The second overstrike is a silver tetradrachm of Byzantium of the posthumous Lysimachus type over a coin of Aesillas. The place of this particular issue in the sequence of Byzantium has been established by hoard evidence to ca. 89–84, which fits excellently with the traditional dating of Aesillas to ca. 94–88.<sup>21</sup> The evidence of the two overstrikes is greatly strengthened by the fact that their chronology was originally worked out quite independent of any considerations of the Athenian new style coinage. The authors arrived at their conclusions by the use of sound and natural methods of history and numismatics.

Thus we have arrived at a dead end. On one side, we have the low chronology supported by hoard evidence, the prosopography of Diokles and general historical probability. On the other, the two overstrikes just mentioned. In this dilemma a choice must be made, and most scholars have opted for the first alternative and accepted the low chronology. In my opinion they are right, but this leaves the problem of explaining the overstrikes. D. M. Lewis, in the first serious attack on Margaret Thompson's chronology, proposed the radical solution of moving Aesillas, Sura and Caesar of the Macedonian coinage down to the early 60s. This is, of course, a possibility which, due to our ignorance of the Macedonian fasti, cannot be excluded, but it involves discarding the one bit of factual evidence we have, namely the activities of Sura in Greece and Macedonia in 87.22 Nevertheless, this proposal has been adopted by H. B. Mattingly, who in a later article has also tried to change the chronology of the Byzantium coinage in order to



<sup>&</sup>lt;sup>19</sup> IG XII.8, 241.

<sup>20</sup> Thompson, "Athens Again," pp. 329-31.

<sup>&</sup>lt;sup>21</sup> Thompson, "Byzantium over Aesillas," pp. 54-65. For the chronology of the Byzantium coinage see P. Pollak, "A Bithynian Hoard of the First Century B.C.," ANSMN 16 (1970), pp. 45-56.

<sup>&</sup>lt;sup>22</sup> Lewis (above, n. 3), pp. 296-99.

accomodate it to the low chronology.<sup>23</sup> However, his dating of the overstruck Byzantium coin to ca. 70 seems too late and is still a few years too early, if the Aesillas undertype was produced during L. Caesar's hypothetical governorship in Macedonia ca. 69–67.

Another possibility which requires less drastic interference with the evidence is worth discussing. But first it is necessary to examine the structure of the Aesillas coinage. It consists of three series: one without any mint mark, presumably struck at Amphipolis; a second with mintmark 8 or 8 from Pella, the district capital of Bottiaea; and a third series marked 9 for Thessalonica. The first two series are small, comprising six and two obverse dies respectively. On the other hand, the Thessalonica series is enormous. Over 150 obverse dies have been counted and more may well appear. Only one die was used by Sura, and this had already served Aesillas. The question is whether or not all of this huge production belongs to the relatively short period of Aesillas's quaetorship.

Some of these coins have small pellets placed in various positions on the reverses: below Q, between the legs of the stool, beneath the basket. They may have served as secret marks to distinguish different issues, a practice well known from later periods. That is to say, while the bulk of the coinage belongs to the quaestorship of Aesillas, these minor groups may represent later issues. The large issue by Aesillas will have accustomed people to this particular coinage, and therefore it may have been deemed expedient to revive it at intervals instead of introducing new types and names. The Aesillas coin overstruck on the Athenian Demeas-Kallikratides coin actually belongs to one of the small groups with special marks: a pellet below the basket on the reverse, as we can see from other specimens sharing the same obverse die. If this subgroup of the Aesillas coinage can be dated to ca. 65, the problem has found a neat solution.<sup>24</sup>



<sup>&</sup>lt;sup>23</sup> H. B. Mattingly, "L. Julius Caesar, Governor of Macedonia," *Chiron* 1979, pp. 147-67.

<sup>&</sup>lt;sup>24</sup> C. Boehringer, "Hellenistischer Münzschatz aus Trapezunt 1970," SNR 1975, p. 62, suggests a similar solution. To him the Aesillas tetradrachms were struck as a type immobilisé from his quaestorhsip in 94-98 right down to the time of Caesar. The announced publication of the detailed arguments has not yet appeared.

The hypothetical nature of these considerations is all too evident. Admittedly it is an attempt to explain away the difficulties, but the problem is real, and a solution must be suggested. The suggestion just outlined has, in my view, the great advantage that we are not forced to interfere with other evidence; Aesillas can still be dated ca. 94–88, and there is no need for changes in the well-established chronology of the posthumous Lysimachus coinage of Byzantium.

#### THE BEGINNING OF THE COINAGE

As already mentioned, the beginning of the Athenian new style coinage was placed by Margaret Thimpson in 196/5, by the adherents of the low chronology in 164/3. A number of hoards containing early Athenian new style in company with other datable coins seems to present difficulties for the low chronology. The best published and most important of these hoards are the following:

	Hoard	Burial	Latest	High	Low
		date	A thenian	Chronology	Chronology
			issue	(1=196/5)	(1=164/3)
1.	Urfa-Edessa <sup>25</sup>	ca. 185-160	7	190/9	158/7
2.	Bakërr <sup>26</sup>	ca. 168	8	189/8	157/6
3.	Babylon <sup>27</sup>	ca. 155-150	8	189/8	157/6

<sup>25</sup> IGCH 1772. The date derives from M. J. Price, "Greek Coin Hoards in the British Museum," NC 1969, pp. 10-14. Many of the Alexander coins show the countermarks anchor and head of Helios, which were probably applied ca. 175-170. In addition to one Athenian new style tetradrachm, the hoard contained late coins of Temnus (Alexanders; Price nos. 4-5) and Cyme (Price no. 91). The dating bracket should probably be reduced to ca. 170-160.

<sup>26</sup> IGCH 559, dated by Margaret Thompson; H. Ceka, "Le trésor numismatique de Bakërr (Fieri)," Studia Albanica 9 (1972), pp. 49-68. A. Giovannini, Rome et la circulation monétaire en Grèce au IIe siècle avant Jésus-Christ (Basel, 1978), pp. 104-5 places the hoard around 150, using the Athenian tetradrachms, dated according to the low chronology, as his fixed point.

<sup>27</sup> IGCH 1774. See K. Regling, "Hellenistischer Münzschatz aus Babylon," ZfN 1928, pp. 92–132. Latest datable coins are tetradrachms of Demetrius I from Antioch without the title of Soter and without dates, i.e. struck before 155.



4.	Trebizond <sup>28</sup>	ca. 150	13	184/3	152/1
5.	Cilicia 1972 <sup>29</sup>	ca. 140	20	177/6	145/4

With the Cilicia 1972 find the composition of the hoard and the low chronology of the Athenian new style is in perfect accordance. In three of the earlier burials, 1, 3-4, the low chronology is just possible. However, it is surprising that, in spite of the great distances involved, the Athenian element should be contemporary with or even later than the local coinage in all these hoards. The Bakerr hoard seems to be decisive for the chronological problem. This hoard, found at ancient Apollonia in Illyria, consisted mainly of coins from Apollonia and Dyrrhachium (242 pieces). The silver coinage of the Epirote Republic is represented by 180 specimen in all the four denominations known: staters (5), drachms (88), one-third staters (46), and one-sixth staters (41).30 To these coins should be added two drachms of Cassope in Epirus. Tetradrachms of Attic weight are also present: three specimens from Thasos, and four Athenian new style pieces from issue nos. 2, 3, 7 and 8. According to the low chronology the last issue was struck in 157/6. The Epirote silver coinage, however, certainly came to an end in 168/7 with the terrible devastation of the country by the Romans. The important thing to keep in mind is that the three groups of coinage, the Illyrian, the Epirote and the Attic weight tetradrachms, all seem to be quite well preserved and therefore should be approximately contemporary. Consequently the Bakërr hoard provides strong evidence for dating issue 8 of the Athenian new style coinage to ca. 170.



<sup>&</sup>lt;sup>28</sup> CH 1 (1975), no. 80; 2 (1976), no. 89, published by Boehringer, pp. 37-64. Latest dated coin is a tetradrachm of Demetrius I of Syria year 158 S.E. = 155/4. <sup>29</sup> CH 1 (1975), no. 87A-B; 2 (1976), no. 90. Latest dated coins are of Demetrius II of Syria, 143/2.

<sup>30</sup> A. Giovannini (above, n. 26), pp. 105-7 has rightly pointed out that the contents of the Bakërr hoard necessitate a revision of the chronology of the Epirote silver coinage as established by P. R. Franke, Die antiken Münzen von Epirus (Wiesbaden, 1961), pp. 136-50. The large group of coins with the "Kephalos" monogram K must be dated to the years shortly before 168/7 rather than to the third century. This dating was envisaged by Franke himself in an earlier paper: "Zur Finanzpolitik des makedonischen Königs Perseus während des Krieges mit Rom 171-168 v. Chr.," JNG 1957, p. 43.

Two other hoards, which are frequently brought into the discussion, do not have the evidential value often ascribed to them. The Anthedon hoard (IGCH 223) proves that the wreath coinages of Chalcis and Eretria started at about the same time as the Athenian new style. However, its value for the absolute chronology depends on the identification of the Eretrian mint magistrates with persons known from epigraphical sources to have been active in the years around 200. With all the uncertainty and ambiguity inherent in the use of prosopographical data,<sup>31</sup> this is unreliable.

On the other hand, the Sitichoro hoard (IGCH 237) has often been used by the supporters of the low chronology to prove their dating. This deposit, buried ca. 167 near Pharsalus in Thessaly, contained no new style coinage of Athens but did include 11 tetradrachms of the rare preceding series with symbols.<sup>32</sup> It is argued then that these coins must have been struck until ca. 170 and that, consequently, the introduction of the new style silver must come after that time. This is obviously an argument ex silentio. It is not possible to know whether the owner of the hoard, by accident or intention, excluded new style silver from his deposit. Moreover, the hoard (like so many others) was dispersed soon after its discovery, and our knowledge of its composition is due to careful reconstruction. Finally, it should be stressed as a matter of principle that the absence of a group of coins from one, imperfectly recorded hoard should never be considered reliable evidence for a terminus post quem for the missing coinage. Otherwise, the rather absurb notion is implied that a hoard must necessarily contain speciments of all known coinages circulating in the area at the time of its burial.



<sup>31</sup> M. Thompson, "The Beginning of the Athenian New Style Coinage," ANSMN 5 (1952), pp. 25-33; Lewis (above, n. 3), pp. 294-96; Thompson, "Athens Again," pp. 325-29. For Eretria see W. P. Wallace, "Some Eretrian Mint Magistrates," The Phoenix 1950, pp. 21-26. See also N. Waggoner, "Coins from the William P. Wallace Collection, ANSMN 25 (1980), pp. 1-15.

<sup>&</sup>lt;sup>32</sup> On these transitional issues see now H. Nicolet-Pierre, "De l'ancien au nouveau style athénien: une continuité?," in S. Scheers, ed., *Studia Paulo Naster Oblata* 1 (Louvain, 1982), pp. 105-12.

At this point a new element may be introduced into the discussion. From Macedonia we have the following two emissions of bronze coinage:33

- a. Obv. Head of Athena Parthenos r., copied from the Athenian new style silver.
  - Rev. BOTTEATΩN Grazing ox r.
- b. Obv. Head of Athena Parthenos r., copied from the Athenian new style silver.
  - Rev. ΓΑΙΟΥ ΤΑΜΙΟΥ ΠΟΠΛΙΛΙΟΥ or ΓΑΙΟΥ TAMIOY Grazing ox r.; below, **B** (monogram of Bottiaea).

Both issues were struck at Pella for the district of Bottiaea. The first belongs to the period ca. 187–168, when Philip V and Perseus allowed a number of districts and cities in Macedonia to strike bronze coins and small silver in their own names. The Roman quaestor C. Publilius is generally dated ca. 148–146, but recently a convincing case has been put forward for dating him to 168–167, immediately after the Roman victory over Perseus at Pydna.<sup>34</sup> Unless we are prepared to accept a completely new chronology for the Macedonian issues, we must conclude that Athenian new style silver was known and copied in Macedonia, at least during the reign of Perseus (179–168).

Quite recently Christian Habicht established another fixed point in the chronology of the early new style issues.<sup>35</sup> Publishing a list of hieropoioi of the Athenaia festival, dating from 150 or shortly before, he has identified one of these religious commissioners, Timarchides from Thorikos, a member of a well-known family of sculptors, with one of the magistrates of issue no. 16. The first magistrate of this issue was Pokykles, the cousin of Timarchides. Issue 16 still belongs to the period before continuous annual issues had become the rule, so we cannot date it precisely to one year. However, a date between 155 and 150 would fit excellently into my dating scheme. Thus the coinage will be more or less contemporary with Timarchides's appearance as hieropoios.



<sup>33</sup> AMNG 3, Makedonia (1906), nos. 131-33, 209-10.

<sup>&</sup>lt;sup>34</sup> P. A. MacKay, "Bronze Coinage in Macedonia 168-166 B.C.," ANSMN 14 (1968), pp. 5-13.

<sup>&</sup>lt;sup>35</sup> C. Habicht, "Eine Liste von Hieropoioi aus dem Jahre des Archons Andreas," *MDAI(A)* 97 (1982), pp. 178-80.

#### CONCLUSION

As mentioned in the introduction, I do not believe the Athenian new style coins were issued in an unbroken annual sequence from the beginning to the end. There is no difficulty in accepting a chronology that distributes the series over 140 to 145 years, as indeed there can not be if this discussion carries any conviction at all.

The following tentative arrangement fits the facts as I see them. The Athenian new style coinage started ca. 185–180. The first section, issues 1–19, covers the period down to ca. 145. Within this period issue 8 can be dated to ca. 170, issue 13 may belong to ca. 160 and issue 16 to ca. 155–150. From issue 20 emissions become larger and die links between issues begin to appear, indicating that the annual sequence may start here. Counting back from the Mithradates-Aristion issue (no. 78) of 87/6, issue 20 will fall in 145/4. The continuity lasted until issue 87 which can be placed in 78/7, assuming there are no gaps after Sulla's conquest of the city. The last 25 issues, from 88 to 112, must be spread over a period of ca. 35 years down to the end of the new style coinage in ca. 45–40.

According to this reconstruction a major change in the new style coinage occurs in 145/4, that is immediately after the Achaean war and the destruction of Corinth. These events resulted in a sharp decrease in the production of the important coinages of the Greek Leagues, the so-called symmachikon argyrion,<sup>36</sup> which had played such an important role in Greek monetary circulation during the preceding 50 years. At the same time, the issuance of Attic weight silver coins in Macedonia seems to have come to an end. The market must have felt a strong demand for a replacement of the diminished volume of silver currency. In all probability this sudden dearth of other silver coinages led to the increased production of Athenian new style silver. It may be that the well-known decree of the Amphictiony in Delphi, establishing the Athenian silver coinage as legal tender among the member states, belongs to the same period.<sup>37</sup>



<sup>36</sup> On this term see, most recently, A. Giovannini (above, n. 25), pp. 43-51.

<sup>&</sup>lt;sup>37</sup> SIG 729. See O. Morkholm, "Chronology and Meaning of the Wreath Coinages of the Early 2nd Cent. B.C.," NumAntClas 9 (1980), p. 149. This suggestion is, of course, put forward as nothing but a working hypothesis. The inscription can only be dated within the period ca. 167–100.

(PLATES 4-5)

RICHARD G. McALEE

During the reign of the Roman emperor Septimius Severus (A.D. 193-211), silver tetradrachms were struck in Syria bearing three different mint symbols: (1) the leg and thigh of an animal; (2) a club and murex shell; and (3) a star. All three mint marks are located on the reverse of the coins, below the ubiquitous eagle, and in the case of the first two, serve as a perch for the eagle.

The coins with the leg and thigh have consistently been attributed to Antioch-ad-Orontes, and those with the club and murex shell to Tyre.<sup>2</sup> The coins with the star were previously attributed to a second officina at Antioch, until Bellinger observed that their style was so different from that of the coins with the leg and thigh that they must have been struck at a different mint, which he concluded was Laodicea-ad-Mare.<sup>3</sup> This attribution is generally accepted today, and is not questioned here. The purpose of this article, rather, is to refine and revise the chronology proposed by Bellinger for the issues of Laodicea, and to update his catalogue of types by including varieties unknown to him.

<sup>&</sup>lt;sup>1</sup> I wish to express my thanks to the ANS, particularly William E. Metcalf and Nancy M. Waggoner, for assisting me with this article. I am also indebted to the following persons and institutions for supplying me with information, casts, and photographs: David R. Walker, Dr. Hubert Lanz, Numismatic Fine Arts, Inc., John A. Seeger, R. A. G. Carson (London), Bernhard Overbeck (Munich), H. D. Schultz (E. Berlin), and M. Amandry and M<sup>me</sup> H. Nicolet (Paris).

<sup>&</sup>lt;sup>2</sup> A. R. Bellinger, The Syrian Tetradrachms of Caracalla and Macrinus, ANSNS 3 (New York, 1940), pp. 21–22 and p. 87; hereafter cited as Bellinger.

<sup>&</sup>lt;sup>3</sup> Bellinger, p. 30.

#### THE CITY'S MINT MARK

Preliminarily, however, the mint mark used on the coins deserves further comment. The other two symbols mentioned each represent something characteristic of their mint cities. The leg and thigh symbol refers to the legend of the founding of Antioch, in which an eagle was said to have carried off that portion of a sacrificial animal to a hill, which Seleucus I took to be a sign from Jupiter that he was to found the new city there.4 The club is symbolic of Melgarth-Herakles, the patron deity of Tyre, and the murex shell refers to the local production of purple dye from shellfish.<sup>5</sup> Tetradrachms bearing the portrait of Caracalla or Geta were struck during this period without any mint symbol, but with a head of Melqarth-Herakles on the reverse, and these are also clearly Tyrian in origin.6 Likewise, there are rare types of Septimius Severus and Caracalla with the Tyche of Antioch depicted on the reverse, which are linked to the coins with eagle on leg and thigh by common obverse dies.7 Finally, Caracalla and Macrinus struck wartime tetradrachms during the period 215-18 at more than two dozen additional mints, with symbols indicative of the places where they were struck.8

It seems likely, therefore, that the star symbol is somehow associated with Laodicea, yet no link between the mint mark and Laodicea has been suggested. It may be that the "star" on these coins does not represent a star at all, but rather the beacon of a lighthouse. Laodicea was a well-known port city in antiquity, and possessed a lighthouse modelled on that of Alexandria. The lighthouse appears on some bronze

- 4 BMCGalatia, p. lx.
- <sup>5</sup> BMCPhoenicia, pp. cxxvii and cxxxviii.
- <sup>6</sup> Bellinger 298, 299, and 302. There is a die link (which Bellinger did not comment upon) between a coin of Caracalla with the eagle reverse (Bellinger 297) and one with the Melqarth-Herakles reverse (Bellinger 299). See Bellinger, pl. 21, 3 and 5.
- <sup>7</sup> For the types of Severus, see Bellinger, pp. 21-22. For similar types of Caracalla, which were unknown to Bellinger, see Münz. u. Med. 61, 7-8 Oct. 1982, 173 (compare Hess 49, 28-29 Apr. 1971, 407, same obv. die) and 174, and Bank Leu 33, 3 May 1983, 95 (compare Birkler & Waddell 2, 11 Dec. 1980, 409, same obv. die).
  - 8 Bellinger, pp. 9-14.



coins of Laodicea, including a rare type with confronted busts of Severus and Caracalla attributed by Seyrig to Laodicea, and it would be an appropriate symbol for the city. It would be difficult, however, to execute a meaningful likeness of a lighthouse in the small space available under the eagle on these coins, so an abbreviated representation may have been used: the beacon of the lighthouse, visible from a distance as a point of light, similar in appearance to a star.

It is true that the star symbol reappears on the billon tetradrachms of Elagabalus, which have been attributed to Antioch. Antioch frequently used a star on its coinage, often in conjunction with a ram or other symbol, but occasionally without any other symbols, so the attribution is not unreasonable. It is somewhat difficult to reconcile the use of the same symbol to designate two different mints, but the differences between the Severan tetradrachms with the leg and thigh and those with the star are persuasive evidence that the latter were not struck at Antioch. We can only conclude, therefore, that the star symbol indicated something different on the coins of Elagabalus than it did on those of Severus and his sons. Elagabalus consolidated the numerous Syrian wartime mints, and the symbol on his tetradrachms may have been intended to represent something of broader significance than their place of issue. Dieudonné suggested that the star symbol on the tetradrachms of Elagabalus represented the sun, and this

- <sup>9</sup> H. Seyrig, "Le phare de Laiodicée," Syria 29 (1952), pp. 54-59. See also BMC-Galatia, p. 250, 24.
- <sup>10</sup> Bellinger 42–48. These coins are frequently confused with the tetradrachms of Caracalla from Laodicea. The easiest way to distinguish them is the presence of the letters  $\Delta$  and  $\varepsilon$  in the field beside the eagle's head; the letters never appear on the tetradrachms of Laodicea. See also *BMCGalatia*, p. 202, 416, a tetradrachm of Caracalla from Laodicea wrongly attributed to Elagabalus.
- <sup>11</sup> For example, *BMCGalatia*, p. 159, 62-67 (municipal bronze coins issued A.D. 12-13) and pp. 205-6, 451-56 (large bronze coins of Elagabalus).
- <sup>12</sup> For example, *BMCGalatia*, p. 178, 224–26 (tetradrachms of Vespasian, *rev.* head of Titus), and p. 191, 338 and 339 (bronze coins of Marcus Aurelius).
- $^{13}$  A. Dieudonné, "L'aigle d'Antioche," RN 1909, p. 478 = Mélanges 2, p. 103. Bellinger, p. 66, suggested that the star symbol found in conjunction with a lion on the tetradrachms of Heliopolis represented the sun, but a recent article interprets that symbol as the star Regulus; see K. J. Rigsby, "The Imperial Tetradrachms of Heliopolis," ANSMN 25 (1980), p. 61. A star symbol frequently appears on the Roman coinage of Elagabalus in a manner that unequivocally identifies it as the



would certainly have been an appropriate emblem for the chief priest of the sun god.

#### TYPOLOGY AND CHRONOLOGY

The Laodicean tetradrachms of Severus and his two sons, Caracalla and Geta, can be categorized in six distinct groups, chronologically arranged as follows.

Group 1. A.D. 205-7 (Plate 4, 2, 6, and 14)

All the coins in this group are characterized by an eagle with no wreath in its beak, whereas all subsequent types have an eagle with a wreath.<sup>14</sup> The portraits are generally of fine style, and most frequently depict a bust, usually draped and cuirassed or in a cuirass seen from the front. The eagle's wings are the same height. Its head is variously right or left.

The coins of Severus are dated by his third consulship (202-11), while those of Caracalla are dated by his second consulship (205-7), and those of Geta by his first consulship (205-7). The strong stylistic similarities between Severus's coins and his sons' coins in this group (particularly the absence of a wreath in the eagle's beak) lead to the conclusion that they all were struck during the period 205-7.

Group 2. Ca. A.D. 207-8 (Plate 4, 16, 18, and 21)

All the coins in this group have an eagle with its wings slanted downward toward the viewer's left. The wings are of roughly equal height,

sun. See, for example, RIC 4.2, 131, a denarius which shows Elagabalus sacrificing over an altar, with a star in the field, and which bears the legend SACERD. DEI SOLIS ELAGAB.

14 Bellinger 54 is erroneously described as having an eagle with no wreath. Examination of a cast of the coin, provided by the Staatliche Museen in East Berlin, revealed a wreath above the eagle's beak, between the letters X and € in the inscription, where it is easily mistaken for another letter. The coin is illustrated by Bellinger (pl. 5, 6), and the wreath can be made out upon close scrutiny. Bellinger 54 is therefore an example of Bellinger 54a (examples of which are shown here at Plates 4, 28 and 5, 28). References to this type hereafter are to "Bellinger 54/54a."



unlike later issues. The eagle always has a wreath in its beak, and always has its head to the left, features which also characterize subsequent issues.<sup>15</sup> The portraits are now usually large draped busts or large heads. The more elaborate types of busts characteristic of Group 1 occur only rarely in this or in subsequent groups.

The coins of Severus in this group are dated, as always, by his third consulship. Those of Caracalla are dated either by his second consulship (205–7) or his third (208–12). Those of Geta are dated either by his first consulship (205–7) or his second (208–12), but he is always designated Caesar, so they must precede his elevation to Augustus in 209. All of the coins in this group are relatively scarce, with few obverse dies known for each type. This suggests that the coins were struck during a brief period of time, although that period must have encompassed parts of the years 207 and 208, inasmuch as the coins of Caracalla and Geta overlap their successive consulships. The most likely period of the issuance of these coins, therefore, is 207–8. Specific types of Caracalla or Geta can be assigned either to 207 or to 208, depending on the consulship referred to on the coin.

Group 3. Ca. A.D. 208 (Plate 4, 28 [ANS] and Plate 5, 25, 28 [NFA] and 29).

The coins in this group are characterized by an eagle with wings of uneven height, the wing to the observer's right being raised markedly above the other. The portraits are usually large draped busts or heads, similar to those in Group 2 but of a noticeably cruder style.

Severus's coins are again dated by his third consulship, and Caracalla's by his third. The only type known for Geta in this group is dated by his second consulship, but he is still designated Caesar, and it must, therefore, have been struck in 208. The stylistic similarity with the types of Severus and Caracalla in this group indicates that all the coins were struck during 208, or shortly thereafter.

<sup>15</sup> Bellinger 69, which has an eagle with head right, is clearly a counterfeit, as Bellinger suggested. It is noteworthy that on the contemporary tetradrachms from Antioch the eagle's head is always to the right (Bellinger 2–16). It seems likely that this convention was adopted, after the initial issues in Group 1, as an additional means of distinguishing the two mints.



# Group 4. A.D. 209-12 (Plate 5, 30, 32 and 36)

The coins in this group are similar to those in Group 3, but the portraits are smaller and do not extend into the area of the legends. The eagle is also more compact and the flans themselves are of reduced diameter. The portraits of Caracalla and Geta are now bearded for the first time.

Severus's and Caracalla's coins are again dated by their third consulships, and Geta's by his second. As with the prior groups, Geta's coins are the key to dating. Geta is now designated Augustus, so the issue must fall between his elevation to that rank in 209 and his murder in 212. Severus's coins presumably ceased in 211, when the founder of the Severan dynasty died.

# Group 5. Ca. A.D. 212 (Plate 5, 38)

The coins in this group are solely of Caracalla. The eagle's wings are not so markedly different in height as in the prior two groups, and the ruler's portrait is somewhat larger than those in Group 4, although not as large as those in Groups 2 and 3. One type has a draped and cuirassed bust, unseen for several years.

The coins are dated by Caracalla's third consulship, but the absence of any parallel types for Severus or Geta indicates that they were limited to the final year of the consulship, after the deaths of the other two rulers.

#### Group 6. Ca. A.D. 215-17

The final issue of the series is the debased and very common type of Caracalla dated by his fourth consulship (213-17). The barbaric style represents a complete break with earlier issues, and indicates that there was a hiatus between the last silver coinage in 212 and the initiation of this billon coinage, probably in connection with the Parthian war in 215.

Having described the characteristics of each group individually, it may be useful to examine the development of the series as a whole. As one would expect, the portraits of Caracalla and Geta show the physical maturation of the princes, ranging from the childlike portrayals



in Group 1, through the adolescent features in Groups 2 and 3, to the bearded faces in Group 4. Caracalla turned 17 and Geta 16 during the year 205, and it was probably in this year that the first coins of the series were struck, bearing very youthful portraits of Severus's sons. (Plate 4, 6 and 14). On the coins of Group 2 Caracalla is shown with his first facial hair, which appears as a wispy sideburn (Plate 4, 18), although die wear or circulation makes this feature difficult to see on many specimens (Plate 4, 28). In Group 3, Caracalla's sideburn has grown to a muttonchop (Plate 5, 28). He is always shown as clean shaven in the coins of Group 1, and fully bearded in Group 4, confirming that Groups 2 and 3 fall between them in time.

The style of the coinage deteriorates with each successive group, and at the same time the issues become more common. Some of the earliest issues are of exceptionally fine style (Plate 4, 2), and while a high level of skill continues to be shown in the coins in Group 2, the portraiture deteriorates markedly in Group 3. This is somewhat surprising, because some of the coins in Group 2 can be dated to 208, the same as Group 3. The sudden change in style may have been the result of an increase in the output of the mint; while all Group 1 and 2 types are either rare or scarce, the Group 3 types of Severus, at least, are relatively common. The style of the Group 4 coinage is crude, and Caracalla and Geta are no longer distinguishable except by the coins' legends; the coins of all three rulers are relatively common. The final decline in artistry is seen in the billon issue of Group 6, in which Caracalla's portrait is very poorly rendered, undoubtedly the result of the pressure to produce an eastern coinage of vast quantity for military purposes.

Walker's analyses of the metrology of Roman silver coins indicate no significant differences in weight or fineness between the first five groups (average weight 13.5 g, average silver content 63%), but show a consistently lower weight and fineness for the coins in Group 6 (average weight 12.6. g, average silver content 35%). Walker observed that the lack of any Cos. IV tetradrachms struck on the earlier standard probably means that the Syrian mints were inactive "from about the

<sup>16</sup> D. R. Walker, *The Metrology of the Roman Silver Coinage*, 3, BAR Suppl. 40 (Oxford, 1978), 5066-88 and 5106-9. Individual specimens can vary substantially from the averages cited.



time of the death of Severus until 215; for it is more reasonable to associate Caracalla's debasement with 215, after the reform in the central currency, than with 213."<sup>17</sup>

There is one other characteristic of the coins in the series that appears to be related to their chronology. On most of the Group 1 and Group 2 coins of Severus and of Caracalla, the consulship of the ruler is indicated by VΠΑΤΟC.B (Cos. II) or VΠΑΤΟC. Γ (Cos. III). In later issues, the word TO is added before the numeral, and the inscription reads VNATO C. TO.B or  $V\Pi A TOC. TO. \Gamma$ . The word TO is present on all of Geta's coins dated by his own offices, probably because at the time coins in the first two groups were struck he had not yet received the tribunician power ( $\triangle$  HMAPX. $\in \Xi$ .), and the reverse inscription is therefore quite brief, allowing additional space within which to add the two letters. The addition of TO before the consular year for Severus and Caracalla seems to be more than the whim of the die cutter, because a similar change occurred at Antioch at about the same time: on the Antiochene tetradrachms of Caracalla and Severus dated prior to 209, the consulship was abbreviated VNATO.B or VNATO.  $\Gamma$ , but during the period 209–12, the inscription was changed to  $V\Pi ATOC.TO.\Gamma$  (Caracalla) or  $V\Pi ATO$ C. TO.B. (Geta). 18

In most respects the chronology outlined above is compatible with Bellinger's, although it is more specific than Bellinger's because Geta's coinage is used to derive the dates of similar issues of Severus and Caracalla. On one point, however, there is a substantial difference. Bellinger assigned certain coins of Caracalla to the period 202–4, on the assumption that the date VΠΑΤΟC.ΤΟ.Γ on some of them referred not to the third consulship of Caracalla, but to that of Severus. The above chronology assumes, instead, that all of Caracalla's coins refer to his own consulship, and therefore indicates that none were minted prior to 205.

The evidence to support the latter view is, first, the fact that the tetradrachms with the most youthful portraits of Caracalla are dated



<sup>&</sup>lt;sup>17</sup> Walker (above, n. 16), p. 97. Bellinger 17, however, is a Cos. IV tetradrachm from Antioch which is of the same type as the Antiochene Cos. III tetradrachms. Walker had no specimens of this type available to analyze.

<sup>18</sup> Compare Bellinger 1-10 and 13-15 with Bellinger 11-12 and 16-17.

<sup>&</sup>lt;sup>19</sup> Bellinger, p. 32.

Cos. II, not Cos. III (Plate 4, 6), and second, the fact that the tetradrachms of Caracalla dated Cos. III are very similar in style to the tetradrachm of Geta assignable to 208 (Plate 5, 28 and 29). The conclusive proof, however, is a die link between Bellinger nos. 57 and 54/54a, which bear the dates Cos. II and Cos. III, respectively. Bellinger dated the Cos. II coins to 205–7, and the Cos. III coins to 202–4. The same obverse die was used in conjunction with several reverse dies,<sup>20</sup> and while the coins dated Cos. II show no signs of die wear, many of the coins dated Cos. III show wear on the obverse die, particularly in the drapery at the base of the bust. (Plate 4, 5 and 7). Two specimens in the ANS collection dated Cos. III show the same pattern of wear on the obverse, thus confirming that the wear was on the die and was not merely the result of circulation or poor striking of the coins. The coins dated Cos. III must therefore have been struck later than those dated Cos. II, and could not have been issued earlier than 208.

The remaining coin of Caracalla which Bellinger dated to 202-4 (Bellinger no. 55) was known to him only from an auction catalogue in which the reverse was not shown. Photographs of the reverse<sup>21</sup> of this type are now available, and show its style to be identical to that of the Cos. III coins discussed in the preceding paragraph, as well as that of the other Group 3 coins dated here to ca. 208. In addition, the portrait of Caracalla shows features that are clearly older than those depicted on the coins in Group 1. Finally, the form of the consular designation is VΠΑΤΟC.ΤΟ.Γ., which is consistent with a relatively late date. The evidence therefore compels the conclusion that Bellinger 55, like Bellinger 54/54a, was dated by Caracalla's third consulship, not his father's.

There is one coin that does not fit neatly into the arrangement proposed here: a type of Geta as Caesar, with a youthful bust of the prince,



<sup>&</sup>lt;sup>20</sup> Cahn 71, 14 Oct. 1931, 1005 (rev. VΠATOC.B); Münz. u. Med. 61, 7–8 Oct. 1982, 188 (same date, different rev. die), shown here at plate 4, 18; NFA 6, 27–28 Feb. 1979, 763 (rev. VΠATOC. Γ); Bellinger, pl. 5, 6 (rev. VΠATOC. ΤΟ. Γ); Bank Leu 33, 3 May 1983, 93 (same date, different rev. die); and two specimens of Bellinger 54/54a in the ANS (same date, different rev. dies, one of which is shown here at plate 4, 28).

<sup>&</sup>lt;sup>21</sup> Münz. u. Med. 41, 18 June 1970, 601 = NCirc 1971, 8408; Münz. u. Med. FPL 336, July 1972, 43; NFA 12, 23-24 Mar. 1983, 399.

dated VNATOC.  $\Gamma$  (Cos. III).<sup>22</sup> This can only refer to his father, inasmuch as Geta never received a third consulship. Moreover, the coin refers to the tribunician power, which Geta did not hold while he was Caesar, so the reference once again must be to his father. The coin is an anomaly in this regard, because all other known examples of Syrian tetradrachms of Geta are dated by his own powers, at Antioch and Tyre as well as at Laodicea. It is natural to assume that this coin preceded the issues of Geta dated by his own consulship, and Bellinger dated the coin to 202–4 on this ground.<sup>23</sup>

The evidence, however, suggests a later date. First, the only Antiochene issues of Geta preceding 205 bear the date  $V\Pi ATOC$   $A\PiO\Delta C$   $\Delta C I \Gamma$ , referring to Geta's status as consul designatus in 204.24 In all other cases, the dates of Antiochene and Laodicean tetradrachms are similar for contemporary issues,25 and there is no apparent reason for them to diverge in this case. Second, the eagle on the coin has a wreath in its beak, which appears on none of the Group 1 coins, and the style of the eagle is similar to that on the Group 2 coins. There is one other peculiarity that this specimen shares with the coins in Group 2: the letter  $\Xi$  in the inscription has no crossbar, so it appears as an  $\Gamma$  (Plate 4, 16 and 18). In all other groups, the letter appears with a crossbar.

In the catalogue that follows, therefore, this coin has been placed in Group 2, although the evidence for dating it to ca. 207-8 must be regarded as less certain than for the other types. Its chronological position might be clarified by comparison with similar types of Caracalla, but as yet none have been published. Inasmuch as most of Geta's other issues have parallel types of Caracalla, it is not unlikely that such a coin will be discovered in the future.



<sup>22</sup> Bellinger 56.

<sup>23</sup> Bellinger, p. 32.

<sup>24</sup> Bellinger 17.

<sup>&</sup>lt;sup>25</sup> Bellinger 4 is an Antiochene tetradrachm of Caracalla dated VΠΑΤΟ. Γ which Bellinger assigned to 202–4, but it should be reassigned to ca. 208, for much the same reasons set forth in this article regarding its Laodicean counterparts. If Bellinger 4 is reassigned to ca. 208, it becomes apparent that the earliest Antiochene tetradrachms under Severus with the eagle reverse had an eagle with no wreath in its beak (Bellinger 2 and 5). This is a striking example of parallelism between Antioch and Laodicea, and provides additional evidence that the Group 1 coins are the earliest from Laodicea.

In summary, the arrangement proposed here seems to be the most logical one, and leads to the conclusion that Laodicea did not commence the striking of tetradrachms under Severus and his sons until the period 205-7, somewhat later than Antioch, which was striking them as early as 204.26

# **CATALOGUE**

# GROUP 1. A.D. 205-7

- 1. Obv. .AVT. KAI.CEOVHPOC.CE. Bust of Severus laur. r., in cuirass seen from front.
  - Rev. ΔΗΜΑΡΧ. E. VΠΑΤΟC. Γ. Eagle, hd. r.; star between legs; line below.

Bellinger 49 = BMCGalatia, p. 193, 347 (12.10 g); Münz. u. Med. 61, 7-8 Oct. 1982, 185 (14.24 g) same obv. die; John A. Seeger Coll. (14.3 g) same obv. die; Numismatic Auction Ltd. 1, 13 Dec. 1982, 391 (12.28 g), same obv. die; Bank Leu 33, 3 May 1983, 91 (13.85 g).

- Obv. .AVT. KAI.C€OVHPOC.C. Bust of Severus laur. dr. cuir. r.²7
   Rev. ΔΗΜΑΡΧ.€ Ξ. VΠΑΤΟC. Γ. Type as 1.
   \*McAlee Coll. (12.39 g) = Malloy 15, 30 Nov. 1979, 387.
- 3. Obv. AVT. KAI.CEOVHPOC.CE. Type as 2. Rev. ΔΗΜΑΡΧ.Ε Ι. VΠΑΤΟC.ΤΟ. Γ. Type as 1.

NCirc 1972, 93; Münz. u. Med. 61, 7-8 Oct. 1982, 187 (13.75 g) same obv. die; Hess-Leu 41, Apr. 1969, no. 281 (12.86 g) same obv. die.

<sup>26</sup> See Bellinger 5, a tetradrachm of Geta dated VΠΑΤΟC ΑΠΟΔΕΔΕΙΓ. (consul designatus), and Hess 49, 28–29 Apr. 1971, 407, a tetradrachm of Caracalla dated VΠ.Β.ΑΠ. (Cos. II designatus). Inasmuch as Geta's first consulship and Caracalla's second began on January 1, 205, both coins should be dated to 204. Bellinger, pp. 22–23.

<sup>27</sup> The type of bust described as "draped" does not show the torso; it resembles a head with drapery at the base of the neck. The types described as "draped and cuirassed," however, do show the subject's torso. Illustrated specimens are marked by asterisks.



4. Obv. AVT. KAI.CEOVHPOC.CE. Bust of Severus laur. dr. r. Rev. As 2.

Münz Zentrum 47, 10-12 Nov. 1982, 236, rev. die of 2.

- 5. Obv. AVT. KAI.ANTΩNEINOC.C. Large bust of Caracalla, beardless, laur. dr. cuir. r.
  - Rev. ΔHMAPX. ∈ **Ξ**. VΠATOC.B. Eagle, hd. r.; star between legs; line below.

Bellinger 59 = SNGFitz 5894 (12.66 g); Münz. u. Med. FPL 279, Aug. 1967, 42; Münz. u. Med. 61, 7-8 Oct. 1982, 189 (13.50 g); Ariadne, 7 Dec. 1982, 152 (12.58 g).

- 6. Obv. AVT. KAI.ANTΩNEINOC.CE. Small bust of Caracalla, beardless, laur. dr. cuir r.
  - Rev. △HMAPX. ∈ I. V∏ATOC.B. Eagle, hd. 1.; star between legs; line below.

\*McAlee Coll. (14.93 g) = JSD Coins FPL 61, July 1980, 228.

7. Obv. AVT. KAI.ANT $\Omega$ NEINOC. Type as 6.

Rev. As 6.

Florange, Feb. 1925, 1000 (15.09 g), rev. die of 6.

8. Obv. AVT. KAI.ANTΩNEINOC.CE. Small bust of Caracalla, beardless, laur. dr. r.

Rev. As 5.

Bellinger 58 = Cahn 71, 14 Oct. 1931, 1006.

9. Obv. AVTO. KAI.ANTΩNEINOC.CEB. Small hd. of Caracalla, beardless, laur. r.

Rev. As 5.

Münz. u. Med. FPL 212, June 1961, 54; David R. Walker Coll. (15.73 g), same obv. die.

10. Obv. As 9.

Rev. As 6.

Bank-Leu 22, 8-9 May 1979, 301 (12.85 g). Obv. die of 9; rev. die of 6.



- 11. Obv. KAICAP. .ΓΕΤΑC. Large bust of Geta r., beardless, in cuirass seen from front.
  - Rev. VΠΑΤΟC. TO.A. Eagle, hd. r.; star between legs; line below. CH 4 [1978], no. 83, 3 (13.407 g); SCMB 769, Sept. 1982, no. D80.
- Obv. KAICAP. ΓΕΤΑC. Large bust of Geta, beardless, dr. cuir. r. Rev. As 11.
   Bellinger 60 (ANS, 12.67 g).
- 13. Obv. As 12.
  - Rev. VΠΑΤΟC.TO.A. Eagle, hd. l.; star between legs; line below.

    Bellinger 61 (BM, 11.32 g).
- 14. Obv. KAICAP. ΓΕΤΑC. Small bust of Geta, beardless, dr. cuir r., seen from front.

Rev. As 11.

\*McAlee Coll. (12.17 g) = Münz. u. Med. 61, 7-8 Oct. 1982, 190.

#### GROUP 2. CA. A.D. 207-8

- 15. Obv. AVTKAI CEOVHPOC C Bust of Severus laur. r., in cuirass seen from front.
  - Rev. ΔΗΜΑΡΧΕΞΥΠΑΤΟΟΓ Eagle, hd. l.; wreath in beak; star between legs; line below.

Peus 304, 16-18 Mar. 1982, 410 (12.31 g).

- 16. Obv. AVTKAI CEOVHPOC.CE. Large bust of Severus laur. dr. r. Rev. As 15.
  - A. R. Bellinger, The Excavations at Dura-Europos, 6 (New Haven 1949), p. 121, 203; \*Lanz 20, 13 Apr. 1981, 647 (12.52 g); Bank Leu 10, 29 May 1974, 227 (12.57 g), same obv. die; Numismatic Auction Ltd. 1 13 Dec. 1982, 389 (12.67 g), same dies, and 390 (12.10 g), same obv. die; NFA 12, 23-24 Mar. 1983, 325 (13.96 g); Münz. u. Med. FPL 212, June 1961, 53.



17. Obv. AVTKAI CEOVHPOC.CE. Large hd. of Severus laur. r. Rev. As 15.

Superior Stamp and Coin, 31 May - 1 June 1980, 2431.

- 18. Obv. AVT KAI.ANTΩNEINOC .CE. Large bust of Caracalla, beardless, laur. dr. r.
  - Rev. ΔHMAPX. ∈ I. VΠATOC.B. Eagle, hd. l., wreath in beak; star between legs; line below.

Bellinger 57; BMCGalatia, p. 202, 416 (wrongly attributed to Elagabalus) (14.22 g); \*McAlee Coll. = Münz. u. Med. 61, 7-8 Oct. 1982, 188 (12.83 g); Cahn 71, 14 Oct. 1931, 1005, same obv. die; Münz. u. Med 41, 18 June 1970, 602 = Münz. u. Med. FPL 336, July 1972, 44; Bowers & Ruddy FPL 2, Summer 1979, 74 (15.11 g).

- 19. Obv. AVTKAI ANTΩNEINOC.CE. Large hd. of Caracalla, beardless, laur. r.
  - Rev. ΔHMAP. X ∈ **Ξ**. VΠATOC.B. Type as 18. Munich (13.215 g).
- 20. Obv. As 18.
  - Rev. ΔΗΜΑΡΧΕΞ VΠΑΤΟC Γ. Type as 18.
    \*NFA 6, 27-28 Feb. 1979, 763 (13.11 g), obv. die of McAlee Coll. and Cahn specimens of 18.
- 21. Obv. KAICAP. ΓΕΤΑC. Large bust of Geta, beardless, dr. r. Rev. VΠΑΤΟC.ΤΟ.Α. Eagle, hd. l., wreath in beak; star between legs; line below.

\*McAlee Coll. = Münz. u. Med. 61, 7-8 Oct. 1982, 191 (13.26 g); NFA 12, 23-24 Mar. 1983, 332 (12.62 g), same dies.

- 22. Obv. As 21.
  - Rev. VΠΑΤΟC.ΤΟ.Β. Type as 21.

    BN (12.55 g); Hess-Leu 41, Apr. 1969, 353 (13.5 g), same obv. die.
- 23. Obv. KAICAP. ΓΕΤΑC Small bust of Geta, beardless, dr. cuir. r. Rev. ΔΗΜΑΡΧΕΞ. VΠΑΤΟC. Γ. Type as 21.
   Bellinger 56 (Berlin, 12.39 g).



#### GROUP 3. CA. A.D. 208

- 24. Obv. AVT. KAI. .CEOVHPOC.CE. Bust of Severus laur r., in cuirass seen from front.
  - Rev. ΔHMAPX. ∈ £. VΠATOC. TO. Γ.. Eagle, hd. l., wreath in beak; star between legs; line below.

Bank Leu 33, 3 May 1983, 90 (12.59 g).

25. Obv. AVT. KAI. .CEOVHPOC. .CE. Large bust of Severus laur. dr. r.

Rev. As 24.

Bellinger 52; \*ANS (14.33 g); Münz. u. Med. 61, 7-8 Oct. 1982, 186 (12.83 g.); Schulten, 2-4 June 1982, 853; Münz. u. Med. FPL 336, July 1972, 42; CH 4 [1978], no. 83, 1 (13.616 g); Auctiones A.G. 13, 23-24 June 1983, 346 (13.52 g); Münz Zentrum 48, 27-29 Apr. 1983, 173.

26. Obv. AVT. KAI.CEOVHPOC. .CE. Large hd. of Severus laur. r. Rev. As 24.

Bellinger 50; BMCGalatia, p. 193, 349 (14.06 g).

- 27. Obv. AVT. KAI. ANTΩNEINOC.C. Bust of Caracalla laur. r., beardless, in cuirass seen from front.
  - Rev. ΔHMAPX. ∈ £. VΠΑΤΟC. ΤΟ. Γ.. Eagle hd. l., wreath in beak; star between legs; line below.

Bellinger 55 = Cahn 71, 14 Oct. 1931, 989; Münz. u. Med. 41, 18 June 1970, 601 = NCirc 1971, 8408 = NCirc 1977, 5698; Münz. u. Med. FPL 336, July 1972, 43; NFA 12, 23-24 Mar. 1983, 339 (13.41 g). All from the same obv. die.

28. Obv. AVT KAI.ANTΩNEINOC.CE. Large bust of Caracalla, beardless, laur. dr. r.

Rev. As 27.

Bellinger 54/54a (see above, n. 14); ANS (13.42 g); \*ANS (12.00 g) [Plate 4, 28]; BN (13.71 g); \*NFA 12, 23-24 Mar. 1983, 340 (12.45 g) [plate 5, 28]; Bank Leu 33, 3 May 1983, 93 (12.86 g).



29. Obv. KAICAP. FETAC Large hd. of Geta, beardless, r.

Rev. .VIIA TOCTO.B. Eagle, hd. l., wreath in beak; star between legs; line below.

Bellinger 62 (Berlin, 11.52 g); \*BN (13.05 g), same dies; Bank Leu 22, 8-9 May 1979, 309 (13.94 g), same obv. die; Bank Leu 33, 3 May 1983, 104 (16.21 g), same obv. die.

#### Group 4. A.D. 209-12

- 30. Obv. AVT. KAI. .CEOVHPOC. .CE. Small bust of Severus laur. dr. r.
  - Rev. ΔHMAPX. E. Ξ. VΠΑΤΟC. TO. Γ. Eagle, hd. l., wreath in beak; star between legs; line below.

Bellinger 53; \*ANS (12.08 g); Hess 247, 29 June 1978, 363 (14.18 g); NFA 6, 27-28 Feb. 1979, 756 (13.52 g); NFA, 8 Dec. 1982, 462 (15.39 g); CH 4 [1978], no. 83, 2 (11.732 g).

31. Obv. AVT KAI C€OVHPOC C€ Small hd. of Severus laur. r. Rev. As 30.

Bellinger 51; Munich (13.187 g).

- 32. Obv. .AVT. KAI. .ANTΩNEINOC. CE. Small bust of Caracalla, bearded, laur. dr. r.
  - Rev. ΔHMAPX. € £. VΠΑΤΟC. ΤΟ. Γ. Eagle, hd. l., wreath in beak; star between legs; line below.

Bellinger 63-64 (1); \*ANS (14.05 g); Auctiones A.G. 13, 23-24 June 1983, 347 (12.88 g).

33. Obv. AVT. KAI. .ANTΩNEINOC. CE. Small hd. of Caracalla, bearded, laur. r.

Rev. As 32.

Bellinger 65; Bowers & Ruddy, 19-20 Sept. 1975, 2125 (14.33 g); Bowers & Ruddy, 25-26 June 1976, 3124 (12.62 g); Münz. u. Med. FPL 469, Aug. 1984, 69 (13.67 g).

34. Obv. .AVT. KAI. .ANTΩNEINOC.CE. Small hd. of Caracalla, bearded, radiate r.

Rev. As 32.

Bellinger 67 (BM, 13.57 g).



- 35. Obv. .AVT. KAI. .ΓΕΤΑC. .CE. Small bust of Geta, bearded, laur. dr. r.
  - Rev. ΔHMAPX. ∈ £. VΠATOC. TO.B. Eagle, hd. l., wreath in beak; star between legs; line below.

Bellinger 71 (BM, 14.14 g).

36. Obv. AVT. KAI. . ΓΕΤΑC. .CE. Small hd. of Geta, bearded, laur. r.

Rev. As 35.

Bellinger 70 (\*ANS, 12.47 g; 12.64 g).

# GROUP 5. CA. A.D. 212

- 37. Obv. .AVT. KAI.ANTΩNEINOC.CE. Large bust of Caracalla, bearded, laur. dr. cuir. r.
  - Rev. ΔHMAPX. ∈ £. VΠATOC. TO. Γ. Eagle, hd. l., wreath in beak; star between legs; line below.

Bellinger 66; Lanz 18, 13 May 1980, 489 (14.57 g), same obv. die; Numismatic Auction Ltd. 1, 13 Dec. 1982, 404 (15.27 g), same obv. die.

38. Obv. .AVT. KAI.ANTΩNEINOC.CE. Large bust of Caracalla, bearded, laur. dr. r.

Rev. As 37.

Bellinger 64 (2); \*ANS (13.45 g); CH 4 [1978], no. 83, 4 (13.908 g) and 5 (13.138 g); Münz Zentrum 42, 10-13 Nov. 1980, 127.

39. Obv. .AVT. KAI. ANTΩNEINOC.CE. Large hd. of Caracalla, bearded, r.

Rev. As 37.

Bellinger 65 (1); CH 4 [1978], no. 83, 6 (13.285 g).

# GROUP 6 A.D. 215-17

- 40. Obv. AVT. K.M.A. . ANTΩNEINOC.CEB. Hd. of Caracalla, bearded, r.
  - Rev. ΔΗΜΑΡΧ. ΕΞ. VΠΑΤΟC. ΤΟ. Δ. Eagle, hd. l., wreath in beak; star between legs; line below.

Bellinger 72; BMCGalatia, p. 195, 364-65; CH 4 [1978], no. 83, 7 (13.161 g); Superior Stamp and Coin, 8-11 June 1981, 1797 (13.58 g).



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# THE COINAGE OF NEAPOLIS IN SAMARIA, A.D. 244-53

(Plates 6-15)

KENNETH W. HARL

The present study, encompassing the coins struck during the period 244-53, represents an initial step toward a more comprehensive treatment of the issues of Neapolis in Samaria (modern Nablus) during the imperial age. It is based on the examination of 250 specimens: a total of 154 from the reign of Philip; a single coin, with the portrait and name of Hostilian, from the reign of Trajan Decius and 95 coins from the joint reign of Trebonianus Gallus and Volusian. The issues during this period, the last decade of the mint's activity, constitute a discrete coinage worthy of study. The mint of Neapolis became active under Philip after it had suspended operations some 20 years earlier after the death of Severus Alexander. In Philip's reign Neapolis struck as a Roman colony, using Latin legends; in contrast, earlier it had minted coins which had employed Greek legends and traditional types.

The purpose of this study is twofold: first to catalogue the aes of Neapolis between the reigns of Philip I and Trebonianus Gallus, and



<sup>&</sup>lt;sup>1</sup> See BMCPalestine, p. 63, nos. 112-15; D. C. Barmki, The Coin Collection of the American University of Beirut Museum: Palestine and Phoenicia (Beirut, 1974); cited hereafter as AUB; and M. Rosenberger, City-Coins of Palestine (Jerusalem, 1972-1977), 3, p. 16, nos. 69-72; cited hereafter as Rosenberger. My thanks for assistance and criticisms from William E. Metcalf, Nancy M. Waggoner, Joe Park Poe and R. McIlwaine Frazer.

second to draw those historical conclusions which seem justified by the evidence of the coins. An obstacle to the first goal has, in the past, been the problem of distinguishing the portraits, particularly on worn specimens, of the senior Philip from those of his son. This difficulty has been met by examining and comparing 138 specimens, many of them quite clear, bearing the name and portrait of a Philip. The other major problems include that of the date of the issues of Philip, a question only partly answered, and the complexities of the coinages of Trebonianus Gallus and Volusian, some of which were inscribed in Latin and some in Greek. Were the Latin and Greek coinages struck simultaneously or on separate occasions? If separately, in what order were they struck?

When the mint of Neapolis reopened it struck, as a Roman colony, handsome aes in the name of the Arabian emperor Philip and his family. On the evidence of the coins Philip apparently bestowed colonial rank upon Neapolis, perhaps as part of a campaign to popularize his regime.<sup>2</sup> Coins likewise attest that the emperor extended similar grants to Damascus and his birthplace, the tiny village of Philippopolis.<sup>3</sup> Philip's coins struck by Neapolis were principally of a middle-sized denomination, although at least two fractional denominations were struck as well. A summary of the dies is shown in Table 1.

- <sup>2</sup> See *BMCPalestine*, p. xxvi and *RE* 16.2, s.v. "Neapolis, no. 19," col. 2129 (Hölscher). Rosenberger 3, p. 16, no. 73, publishes a tiny aes with Latin legends for Tranquillina. His reading of the reverse legend as CO/L/IVNE probably should be corrected to CO/L/ AC. The coin probably was minted by Aelia Capitolina; see Kadman, *The Coins of Akko Ptolemais*, CNP 4 (Tel Aviv, 1941), pp. 80-123, for abbreviations of the city name.
- <sup>3</sup> For colonial grant to Damascus by Philip, see *BMCGalatia*, p. lxxv. The colony was not established by Severus Alexander; see *RE 4*, s.v. "Damaskos," cols. 2046–47 (Timpel). The Latin *aes* attributed to Severus Alexander by L. F. de Saulcy, *Numismatique de la Terre-Sainte* (Paris, 1874), p. 43, nos. 3–5; cited hereafter as de Saulcy and Mionnet 5, p. 292, no. 61 and *Supp.* 8, p. 199, no. 27, are suspect. The coin attributed to Julia Mamaea is a misreading of Otacilia Severa; see de Saulcy, p. 44 = *BMCPalestine*, p. 286, no. 25. For the elevation of Philippopolis, see Aur. Vict., *De Caess.*, 28 and *IGRR* 3. 1196 and remarks in Jones, *CERP*, pp. 283–84. For the coinage, see *BMCArabia*, pp. 42–44, nos. 1–10; *SNGCop* 151–52; Rosenberger 4, p. 74, nos. 1–3 and A. Spijkerman, *The Coins of the Decapolis and Provincia Arabia* (Jerusalem, 1978), p. 261, nos. 1–7.



Table 1

Dies During Reign of Philip

	Obv.	Rev.		
Obv. Type	Dies	$Dies^{f a}$	Specimens	
Philip I	7	31	<b>54</b>	
Philip I & II	2	14	22	
Otacilia Severa	4	11 (12)	16	
Philip II	7	37 (41)	55	
	20	93	147	
Philip I, fractional	1	1	3	
Philip II, fractional	1	1	4	
	22	95	154	

<sup>•</sup> There is some sharing of reverse dies. The number in parenthesis gives the total while the table is based on the net after eliminating shared dies.

The coinage was a plentiful and varied one and the die cutting was of high quality, clearly superior to that seen on early third century coins. The consistent style of the die cutting and the uniform fabric and thickness of the flans suggest that this coinage was the product of a single engraver or perhaps an atelier of artists working within the same tradition.

The organization and dating of Philip's coinage is complicated because all coins in the name of a Philip bear legends naming him Augustus, and many specimens are worn so that features which distinguish the two Philips are lost. No portrait, however, preserves the earliest rendition of the boy Philip II. When the clear, relatively unworn examples are compared, two distinct portraits appear that bear some resemblance to portraits on imperial coinage of the Philips. There is a mature bust which must be assigned to the elder Philip, while the younger Philip is depicted, not as a child, but as an adolescent or young man.



<sup>&</sup>lt;sup>4</sup> For diecutting in Phoenicia and Palestine, see remarks in K. Kraft, Das System der kaiserzeitlichen Münzprägung in Kleinasien (Berlin, 1972), pp. 99 and 101 and pl. 117, 5-12.

In particular, these portraits of Philip II consistently exhibit the receding hairline evident on his imperial issues.<sup>5</sup> Further help in classifying the portraits of the two Philips is afforded by two joint portraits, one jugate and the other face-to-face.<sup>6</sup> The portraits on the jugate example are scarcely distinguishable; this die does, however, indicate that the artist intended to treat Philip II not as the boy Caesar but as a young man equal in size and rank to his father and co-ruler. The die with the face-to-face portraits offers a clear guide, in the hairlines and facial features, for determining the identities of the two rulers. In addition, certain obverse dies with the portrait of the junior Philip are combined with a reverse die naming his father in the dative case and presenting the undeniably older bust of Philip I.<sup>7</sup> Based on these depictions, classification of the portraits thus seems relatively secure.

Since the coins of the younger Philip style him as Augustus, his coins and those bearing joint busts clearly must be dated to a time after January 247.8 In addition, the existence of shared reverse dies among seven of the twenty obverse dies used for the middle-sized denomination indicates that at least four obverse dies of Philip I and one of his wife Otacilia Severa belong to the same period. The relationship of the die links is shown in Table 2.

While the rest of the coinage of the senior Philip and his wife Otacilia Severa could date to any time during the reign, the style and fabric point to the last three years of the reign. It is possible that the advancement of Philip II to full powers, and the anticipation of the millennium of Rome, inspired the *ordo* to commission a fine coinage, whether struck as a single issue or in installments during the years 247–48.9 Certainly a laudatory intent for much of this coinage is implied by the frequent

<sup>&</sup>lt;sup>9</sup> For coinage in anticipation of the millennium, see M. Grant, Roman Anniversary Issues: An Exploratory Study of the Numismatic and Medallic Commemoration of Anniversary Years 49 B.C.-A.D. 375 (Cambridge, 1950), p. 131 and see RIC 4.3 p. 62; pp. 70-71, nos. 12-25; p. 82, nos. 115-18 and p. 97, nos. 224-25.



<sup>&</sup>lt;sup>5</sup> See RIC 4.3, p. 56 and compare pls. 5-6 (Philip I) to pl. 8, 10-20 (Philip II).

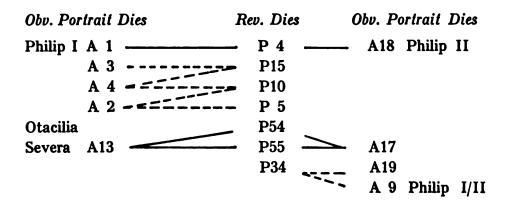
<sup>6</sup> See Cat. 35-48.

<sup>&</sup>lt;sup>7</sup> See Cat. 83.

<sup>&</sup>lt;sup>8</sup> For promotion of Philip II in January 247, see IGRR 1. 1093 and  $PIR^2$ , p. 248, no. 462.

TABLE 2

Die Links for Coins During Reign of Philip



Direct links are indicated by a solid line.

use of the dedicatory dative for the imperial name. One coin of Philip II has been thought to support the notion that at least part of this coinage was struck in connection with civic festivities. An obverse die used to strike middle sized aes, which averaged 27 mm, was struck on a "medallion size" flan (37 mm). This piece may well be a festival coin earmarked for distribution to the crowds or as a reward to athletic competitors. 12

Despite Neapolis's colonial status, evidence from the coins suggests a limited degree of Romanization, even though the Latin on Philip's



<sup>&</sup>lt;sup>10</sup> See dies A1, A6 and A7 (Philip I); A9-10 (Philip I and II); A11-14 (Otacilia Severa) and A15-18 and A20 (Philip II).

<sup>11</sup> Diameters and weights for all coins are summarized in Table 5.

<sup>&</sup>lt;sup>12</sup> See Cat. 92 and remarks in BMCPalestine, p. xxxiv. For a similarly struck coin from the reign of Antoninus Pius, see BN = de Saulcy, p. 248, no. 1 = BMC-Palestine, pl. 39, 17 (43 mm).

coins, save for two minor lapses, is quite good.<sup>13</sup> The reverse types exhibit a peculiar blend of Roman political allusions and native religious sentiments. Several reverses celebrate members of the imperial family, while others display the stock colonial scenes: the founder plowing the pomerium, Roma Nikephoros, the satyr Marsyas of the forum Romanum and the Capitoline wolf nursing the twins Romulus and Remus. The Roman eagle, which, as the bird of Zeus, also possessed local religious significance, appears supporting a tabula ansata proclaiming the proud city's titles or, much more often, upholding the shrine of Zeus Hypsistos on Mount Gerizim.<sup>14</sup> Since in Philip's reign Neapolis never used legionary standards as a coin type, the coins suggest that Philip's grant of colonial rank was probably an honorary gesture.<sup>15</sup>

18 See the odd plural form of A9-10 (Philip I and II) and PHELIPPO for A18 (Philip II). Contrast the less successful efforts elsewhere. At Damascus and Bostra, note the intrusion of Greek Δ, K and P and, at Bostra, the form CESAR and PHILIPPOS: see BMCGalatia, pp. 286-87 and BMCArabia, pp. 23-24. For blundered legends of Mallus, granted colonial rank by Trajan Decius, see BMCLycaonia, pp. cxxiv and pp. 101-2, nos. 30-35; Waddington 4370 and F. Imhoof-Blumer, "Mallos, Megarsos Antioche du Pyramos: étude géographique, historique et numismatique," Annuaire de la Société française de numismatique et d'archéologique 6 (1883), pp. 89-92. Note especially the translation of ίερα σύναλητος as Sacra Sinatvs; see G. Forni, IEPA e ΘΕΟC CVNKΛΗΤΟC: Un capitolo dimenticato nella storia del Senato Romano," Atti della Accademia Nazionale dei Lincei 8, 5 (1954), pp. 59-60 and nos. 536-37. For use of Greek rather than Latin at Philippopolis, see BMCArabia, p. xliii.

supporting a laurel wreath enclosing SPQR; See L. Kadman, The Coins of Caesarea Maritima, CNP 2 (Jerusalem, 1957); pp. 182-83 and nos. 45, 56, 62, 72-73, 77, 85-86, 96-104 and 116. Caesarea and Neapolis, as in the reigns of Macrinus and Elagabalus, most likely shared die cutters; see Kraft (above, n. 4), pp. 99 and 101. For prototypes in Near Eastern art, see BMCPalestine, p. xxix and F. Cumont, "Masque de Jupiter sur un aigle éployé, bronze de musée de Bruxelles," in K. Masner, ed., Festschrift für Otto Benndorf (Vienna, 1898), pp. 291-92. For shrines of Zeus Hypsistos, see M. J. Price and B. L. Trell, Coins and Their Cities: Architecture on the Ancient Coins of Greece, Rome and Palestine (London, 1977), pp. 173-75. See also J. R. Bull and G. E. Wright, "Newly Discovered Temples on Mt. Gerizim (Hadrianic)," Harvard Theological Review 58 (1965), pp. 234-47 and J. R. Bull, "A Preliminary Excavation of a Hadrianic Temple at Tell-er-Ras on Mt. Gerizim," AJA 71 (1967), pp. 387-93.

<sup>15</sup> Contrast contemporary coins at Damascus which include a *vexillum* inscribed VI F(errata) behind the Capitoline wolf and twins; see *BMCGalatia*, p. 286, no. 25; de Saulcy, p. 148, no. 13 and Rosenberger 4, p. 29, no. 41 (Otacilia Severa).



The frequent presence of the city's traditional tutelary deities, striking poses customarily seen on the city's coinage since the reign of Domitian, further strengthens the probability that there was not a settlement of military colonists at Neapolis. The coins offer no evidence that colonists introduced Roman deities into the native pantheon.<sup>16</sup> Instead, save for a lone example of Roma, exclusively hellenized native gods, including Zeus, Serapis, a Neapolitan version of Artemis Ephesia and lesser known deities, strongly suggest that the Neapolitans, while they might have acquired legal and political privileges from Philip, retained their ancestral religious beliefs.<sup>17</sup> Even the Roman colonial types almost without exception include the shrine of Zeus and Mount Gerizim in the background. In its official nomenclature, the colony announced its titles IVLIA and SERGIA which were obtained from its imperial founder, but Neapolis, alone among Roman colonies, also proclaimed itself neokoros, a title customarily held by poleis.<sup>18</sup> Unfortunately there is an absence of epigraphic and literary evidence, but the coins seem to indicate that while Neapolis was raised to the status of a colony, it did not receive a substantial body of veteran settlers.

From the reign of Trajan Decius only a single specimen, a coin of Hostilian, survives. The coin bears Greek legends, but much of the obverse and virtually all of the reverse inscription is lost.<sup>19</sup> Neapolis resumed striking coinage in quantity during the joint emperorship of



<sup>16</sup> For colonial mints honoring both indigenous and Roman deities, see B. Levick, Roman Colonies in Southern Asia Minor (Oxford, 1967), pp. 140-44 and A. Kryzanowska, "Les influences réciproques romaines et indigènes manifestées sur les monnaies des colonies romaines de l'Asie Mineure," RN 1968, pp. 286-92.

<sup>17</sup> See BMCPalestine, pp. xxx-xxxiv. Several of the figures and myths on Neapolis's coins are still obscure. For syncretism of Zeus and Serapis, see W. Hornbostel, Sarapis: Studien zur Uberlieferungsgeschichte, den Erscheingsformen und Wandlungen der Gestalt eines Gottes (Leiden, 1973), pp. 263 and 317. The veiled goddess wearing peplos and often seen with stags or birds probably was considered the consort of Zeus Hypsistos and she was identified as Artemis Ephesia: see R. Fleischer, Artemis von Ephesus und verwandtle Kultstatuen aus Anatolen und Syrien (Leiden, 1973), pp. 269-70. For worship of a Samarian Kore, see D. Flusser, "The Great Goddess of Samaria," IEJ 25 (1975), pp. 13-16.

<sup>&</sup>lt;sup>18</sup> See RE 16, s.v. Νεοκοφοι, cols. 2425–58 (Hanell) and Magie, RRAM, pp. 1497–98, nn. 20–21.

<sup>19</sup> See Cat. 103.

Trebonianus Gallus and Volusian with two distinct coinages, one with Greek and the other with Latin legends. The coins inscribed in Greek employ the titulature and iconography used prior to Philip's reign, i.e., before the city's elevation to colonial rank. Many of the reverses repeat the scene of an eagle supporting Zeus's shrine in Mount Gerizim; others rework depictions of the city gods and one die shows the emperors at sacrifice. The entire repertoire of colonial types, wolf with twins, founder plowing and Marsyas, is missing and, what is more significant, the Greek style aes drop all reference to colonia, Julia or Sergia. Instead, some coins continue to announce νεωκόρος and others add the title ἐπίσημος, which translates Latin insignis.20 Most of the coins, however, revive the earlier  $\Phi \Lambda(\alpha \circ \nu \circ \alpha)$  NEAC  $\Pi \circ \Lambda \in \mathcal{L}$  without reference to  $KO\Lambda\Omega NIAC.^{21}$  The use of Greek and the omission of  $KO\Lambda\Omega NIAC$  on so many dies is not likely to be an oversight. Other Roman colonies in the East almost always included COLONIA or KOΛΩNIAC in the legends on their coins. The absence of the colonial title on the Greek coins of Gallus and Volusian probably indicates that the issuing authority was not a colonial one.

The Latin aes of Trebonianus Gallus and Volusian employ the ethnic COLON(ia) NEAPOLI(s) and are unquestionably the money of a Roman colony. Although all reverse dies show Mount Gerizim, at least two also reproduce undeniably Roman scenes: Marsyas and the Capitoline wolf. Two other scenes show Poseidon or Serapis in the presence of a boar and a vexillum surmounted by an eagle, each of which has, with some plausibility, been connected with the legion X Fretensis stationed at Aelia Capitolina.<sup>22</sup> Thus, under Trebonianus Gallus and Volusian at least some of the coins indicate the possibility of the presence of veteran colonists.



<sup>&</sup>lt;sup>20</sup> Compare the use of ἐνοδοξος at Anazarbus, *BMCLycaonia*, p. civ, or σέμυης ἐνδοξοτέρας at Syedra, p. xxxvi.

<sup>&</sup>lt;sup>21</sup> For foundation of the Greek city and earlier titles, see *BMCPalestine*, pp. xxxv-xxxvi and Jones, *CERP*, pp. 276-77.

<sup>&</sup>lt;sup>22</sup> See Cat. 152 and 155. For boar as the emblem of X Fretensis, see *BMCArabia*, p. xxxiii; for the boar on coins of Aelia Capitolina, see Kadman (above, n. 2), pp. 80–81, no. 6; pp. 86–87, no. 33 and pp. 116–17, no. 186. For the legion at Aelia Capitolina, see *RE* 12.2, s.v. "Legio," cols. 1673–74 (Ritterling).

The Greek coinage, to judge from the surviving dies, appears to have been struck in a respectable quantity for so short a reign. The number of dies with Greek legends so far identified is shown in Table 3.

Table 3

Greek Dies During Reign of Gallus

	Obv.	Rev.	
Obv. Type	Dies	Dies	Specimens
Gallus	7	27	48
Volusian	4	18	26
Volusian, fraction	1	1	3
Total	12	46a	77

<sup>\*</sup> The unusually worn state of many specimens makes identification of die duplicates difficult, so that this number could be too high.

The Latin coinage, in contrast, appears to have been struck on a much more modest scale. Only two obverse dies, one each for Gallus and Volusian, and six reverse dies have as yet been noted, so it probably was a very small issue.

TABLE 4

Latin Dies During Reign of Gallus

Obv.	Rev.	
Dies	Dies	Specimens
1	4	9
1	2	9
2	6	18
	Dies 1 1	Dies         Dies           1         4           1         2

The Greek style coinage consisted of at least two denominations. The larger one averages 25 mm in diameter and probably weighed between 11.00 and 12.00 g when struck, while the smaller coin measures 20 mm in diameter and perhaps weighed 6.50 to 7.00 g. While the Latin style coins are slightly larger in diameter, their weight is compara-



ble to that of the Greek style coins. Under Trebonianus Gallus it seems that the principal denomination, whether minted with Greek or Latin legends, was a slightly reduced version of the main denomination struck under Philip. The surviving Latin coins of Gallus and Volusian appear on the whole to have been minted on slightly larger and better prepared flans and the artistic level, especially of the reverse dies, also seems superior to that of the Greek style aes. The two coinages under Gallus are distinct, and the circumstances behind the two issues require some explanation.

Several numismatists have suggested, in passing, that the Greek coins of Gallus and Volusian were struck for the native population, while the Latin coinage was produced for Roman colonists.<sup>23</sup> Philip's colony, it is argued, resulted in the creation of "double communities" in which the two groups, the natives and the colonists, lived in separate quarters under separate administrations. Analogies have been drawn to the coinage of Antiochia ad Orontem, the great Syrian mint which turned out bronze currency in both languages, and, more recently, to the coins of two Roman colonies in Asia Minor, Iconium and Ninica-Claudiopolis.<sup>24</sup>

Antioch's coinage before the reign of Elagabalus consisted of civic aes bearing the city ethnic, sometimes in Greek and sometimes in Latin, and the so-called "senatorial" coins without a city ethnic but bearing SC on the reverse. The latter coins were probably a provincial currency for Syria and not a civic coinage for Antioch. Each of these coinages, whatever its precise classification, antedate Antioch's elevation to colonial rank and neither of them has anything to do with double communities. Once raised to a Roman colony, Antioch invariably styled itself  $KO\Lambda\Omega NIAC$  on its bronze coins and none of its later aes can be construed as the money of a surviving peregrine community. Comparison



<sup>23</sup> BMCPalestine, p. xxvi.

<sup>&</sup>lt;sup>24</sup> For double communities, see S. Mitchell, "Iconium and Ninica: Two Double Communities in Roman Asia Minor," *Historia* 28 (1979), pp. 409–34 and H. von Aulock, *Münzen und Städte Lykaoniens* (Tubingen, 1976), pp. 55–56.

<sup>&</sup>lt;sup>25</sup> Compare *BMCPalestine*, p. xxvi. For civic aes of Antioch, see G. MacDonald, "The Pseudo-Autonomous Coinage of Antioch," *NC* 1904, pp. 105–35. For various bronze currencies, see D. B. Waage, *Antioch-on-the-Orontes* vol. 4, pt. 2: *Greek, Roman, Byzantine and Crusaders' Coins* (Princeton, 1952), pp. ix-xi.

of Neapolis's Greek and Latin coins under Gallus to those of Iconium under Vespasian or Ninica-Claudiopolis under Hadrian hardly offers a stronger support for the argument that Neapolis possessed double communities each striking its own currency.<sup>26</sup> Even if the coins of Iconium and Ninica-Claudiopolis represent the currencies of two separate authorities within a single city, they antedate the *Constitutio Antoniniana*. In the world after the *Constitutio Antoniniana* the existence of double communities is unlikely and, furthermore, the coins of Philip strongly imply the absence of Roman veteran colonists who might lead to the creation of double communities.

A more promising analogy for the practice of striking issues in different languages comes from Tyre in the third century. This example, while not precisely parallel to Gallus's coinage at Neapolis, still suggests that issues employing two different languages were commissioned by a single civic authority on successive occasions and that the change in language reflected a change in legal status. Tyre, a staunch partisan of Septimius Severus, was awarded colonial rank and minted aes with impeccable Latin legends, but it blundered into supporting an abortive revolt against Elagabalus, who punished the city by stripping it of colonial rank. Tyre's coins thereafter exhibit a peculiar mixture of Greek and Latin legends, which render the city's ethnic as TVRIORVM and drop all reference to COLONIA until it was restored to its status as a

<sup>26</sup> For Iconium, see von Aulock (above, n. 23), pp. 55-58, nos. 297-98 (Vespasian and no. 299 (Titus Caesar) and Mitchell (above, n. 23), pp. 413-16, who argue that these three aes with Latin legends were minted by the Roman colony originally founded by Augustus. The coins in the names of Claudius, Nero, Vespasian, Titus Augustus and Hadrian bearing Greek legends without KOΛΩNIAC were the money of the peregrine community. Except for Vespasian's three coins, no evidence exists prior to 137/8 for a Roman colony at Iconium (CIL III, Supp. 12136). Iconium thus seems to have minted as a polis since Claudius, coined a handful of aes with Latin legends in A.D. 70 for Vespasian and then apparently after losing her colonial rank, reverted to Greek style coinage. For Ninica-Claudiopolis, see BMCLycaonia, pp. 116-18, nos. 1-13 and W. Kubitschek, "Ninica Claudiopolis," NZ 1902, pp. 1-27 for standard colonial aes with Latin legends from Trajan to Maximinus. For possible issues under Augustus, see H. Seyrig, "Monnaies hellenistiques, no. x111: émissions coloniales incertaines," RN, 1969, pp. 49-52. For Greek style aes of Hadrian, see BMCLycaonia, p. 60, no. 1 and SNGvAulock 5655-56. They bear the ethnic  $K \Lambda A V \Delta IO \Pi O \Lambda E I T \Omega N$  and they probably were minted while the city was temporarily demoted; compare Mitchell (above, n. 23), pp. 426-27 and 434.



colony in 221.27 In Tyre's case the shift in language reflected a shift in the constitutional standing of the city. The documented case of Tyre provides the key to understanding the Greek and Latin coins of Neapolis. It seems most likely they reflect similar changes in the city's constitutional position. If so, then it is a question of which coinage was issued first, the Latin or the Greek. It is more probable that Gallus's Greek coinage preceded his Latin one.

Philip I raised Neapolis to the rank of a colony and its coinage proudly advertised this status in Latin. Sometime after the death of Philip I, Neapolis probably forfeited colonial standing and minted Greek inscribed aes. While there is no literary and epigraphic evidence, it seems most likely that Neapolis incurred the wrath of Trajan Decius during the brief civil war of 249, perhaps because it was too enthusiastic in its loyalty to Philip. As punishment, Trajan Decius withdrew the coveted colonial rank from the city. Such a demotion would account for the virtual absence of coinage during Decius's reign and for the use of Greek when coining in the name of Hostilian. At the accession of Trebonianus Gallus and Volusian in 251, Neapolis, enjoying no special favors and ranking as another civitas, coined with Greek inscriptions and employed traditional civic emblems, omitted any reference to COLONIA and used local rather than colonial reverse types. Neapolis, perhaps to assuage its wounded pride for the loss of colonial rank, assumed the title ἐπίσημος and stressed its position as νεωκόρος. Later in the reign of Gallus and Volusian, Neapolis, restored to the status of a colony, commissioned a second, smaller issue with Latin legends. The presence of legionary emblems on the reverse of some aes of this issue might indicate that Gallus strengthened the colony with a contingent of veterans drawn from the X Fretensis. This reconstruction explains why Neapolis, as is evident from the coins, hired a skilled engraver for its Latin aes both under Philip and under Trebo-

<sup>27</sup> For revolt, see *RE* 12.2, s.v. "Legio," col. 1527 (Ritterling). For coinage of demoted Tyre, see *BMCPhoenicia*, pp. 275-79, nos. 416-18 and *SNGCop* 362-63 and 370. All privileges were probably not recovered until 232 when the city secured the assistance of Odenathus, the Senator of Palmyra; see H. Ingholt, "Varia Tadmorea," *Palmyra: Bilen et Perspectives. Colloque de Strasbourg*, 18-20 Octobre 1973 (Strasbourg, 1976), pp. 132-33.



nianus Gallus. Each of these issues celebrated a great event: the grant or the restoration of colonial rank.

The alternative reconstruction, based on the assumption that Gallus's Latin coinage preceded his Greek issues, is not nearly so persuasive. Even if the coin of Hostilian is rejected as a misreading, there is no strong reason to believe that Neapolis forfeited colonial rank, and thus the privilege of coining in Latin, during the reign of Trebonianus Gallus. Illustrious titles and privileges, including the right to coin, were jealously guarded by cities in the Roman East.<sup>28</sup> The loss or diminution of such rights most often came about because the city had grievously offended the emperor during a civil war.<sup>29</sup> The pattern of the last decade of Neapolis's coinage strongly suggests that it, as Tyre had done earlier, ran afoul of a wrathful emperor, most likely Trajan Decius, and that, as a consequence, the city was punished for its misplaced loyalties.

- <sup>28</sup> For the notion of civic coinage as a privilege, see especially L. Robert, "AIT-HΣEMENOΣ sur les monnaies," *Hellenica* 11–12 (1960), pp. 53–62 and remarks of E. W. Klimowsky, "The Monetary Function of City Coins," in A. Kindler and C. H. V. Sutherland, eds., *Proceedings of the International Numismatic Convention*, *Jerusalem*, 27–31 December 1963 (Jerusalem, 1967), pp. 132–33.
- <sup>29</sup> For an earlier example of punishment of Neapolis, see SHA, Sev. 9.4.8 and compare 9.4.14, for Septimius Severus's withdrawal of the ius civitatis. The demotion to a village accounts for Neapolis's inactivity during the reign of Septimius Severus; see BMCPalestine, p. xxvi. For reopening of the mint during Caracalla's Parthian War, see BMCPalestine, pp. 58-59, nos. 84-87 and A. R. Bellinger, The Syrian Tetradrachms of Caracalla and Macrinus, ANSNS 3 (New York, 1940), pp. 93-94. Similar demotions in rank by Septimius Severus explain lacunae in the coinages of Athens, Byzantium and Antioch. For Athens. see SHA, Sev. 3.7 and, for termination of Group 2 of its autonomous aes in 193, see J. H. Kroll, "The Eleusis Hoard of Athenian Imperial Coins and Some Deposits from the Athenian Agora," Hesperia 42 (1973), pp. 312-33. For demotion of Byzantium, see Dio 74.19.2, and for the closure and, in 198, restoration of the mint, see E. Schönert-Geiss, Die Münzprägung von Byzantion (Berlin, 1972), p. 12. For demotion of Antioch, see SHA, Sev. 9.4 and Herod. 3.6.9. For inactivity of the mint, see Waage (above, n. 24), p. ix and G. Downey, A History of Antioch in Syria from Seleucus to the Arab Conquest (Princeton, 1961), pp. 241-42. See BMCCorinth, p. xlv, for Vespasian's suppression of Corinth's coinage and the restoration under Domitian whose aes advertise the restoration of coinage privileges with the legend PERM(issu) IMP(eratoris) GERM(anici). Compare also the disgrace of Pergamum by Macrinus; see Dio 74.20.3-4 and Magie, RRAM, p. 1557, n. 3. For inactivity of the Pergamene mint, see Kraft (above, n. 4), pp. 38-39.



TABLE 5
Summary of Weights and Diameters

	Total	Weight			Diameter		
	Spec.	Spec.	Range	Mean	Spec.	Range	Mean
Latin Style Coinage:							
Philip I	54	47	10.24-17.88	13.93	53	<b>25–30</b>	27
Philip I & II	22	21	10.60-22.20	14.93	22	<b>23</b> –30	27
Octacilia Severa	16	15	12.39-18.22	14.91	16	26-31	28
Philip II	55	45	8.90-19.06	14.40	53•	<b>22</b> –30	27
	147	128	8.90-22.20	14.37	144	22-31	<b>27</b>
Philip I, fraction	3	2	2.04- 5.10	4.07	3	16-19	18
Philip II, fraction	4	4	1.60- 3.31	2.60	4	15–16	15
	7	6	1.60- 5.10	3.09	7	15–19	16
Greek Style Coinage:							
Hostilian	1	1		13.00	1		24
Gallus	48	44	7.20-13.80	11.01	48	22-27	25
Volusian	26	21	9.10-14.56	11.47	26	21-28	<b>2</b> 5
	74	65	7.20-14.56	11.15	74	21-28	<b>25</b>
Volusian, fraction	3	3	5.86- 7.31	6.56	3	20	20
Latin Style Coinage:							
Gallus	9	8	8.23-15.17	12.17	9	25-27	26
Volusian	9	8	8.70-14.50	11.29	9	<b>2</b> 5– <b>2</b> 8	26
	18	16	8.23-15.17	11.73	18	25–28	<del>26</del>

<sup>•</sup> Excludes one "medallion-sized" coin (37 mm).

### **CATALOGUE**

The legends, unless otherwise indicated, read inwardly around the border from 7 to 5 o'clock. Coins illustrated in the plates are marked with asterisks.

Citations for three sources omit the page number; the relevant pages for each of these sources is as follows: *BMCPalestine*, pp. 63-74; *AUB*, pp. 17-26; and Rosenberger 3, pp. 17-26.



In the past there has been difficulty in distinguishing the portraits of Philip I from those of Philip II. Based on criteria of portrait styles explained above, certain coins listed in other catalogues have been reattributed. These pieces have been noted throughout this catalogue. Similarly, the often very worn state of the Greek style coins of Trebonianus Gallus and Volusian has led to a number of misattributions of individual specimens. When the few crucial letters of the obverse legend which indicate the emperor's name are missing and the portrait is very worn, it is quite difficult to ascertain whether the coin belongs to Gallus or Volusian. A sufficient number of clear specimens has been examined to establish the existing obverse dies of both emperors and thus to assure proper attribution of even worn specimens. Pieces reattributed from Gallus to Volusian or vice versa are noted under the appropriate entry.

## Colonial Coinage, A.D. 244-49 (Latin Legends)

#### PHILIP I

- Obv. IMPCMIVLPHILIPPOPFAVG Rad., cuir. with pal. bust r. Rev. COLIVL/NEAPOL Eagle stdg., head r. with wings spread, supporting Mt. Gerizim.
- 1. A1-P1. BMCPalestine 117, 10.24 g  $\downarrow$  29 mm; SNGCop 19, 17.79 g  $\downarrow$  28 mm.
  - Rev. COLIVL/NEAPOL Asclepius stdg. l.; in extended r., patera and l. leaning on serpent-staff; Hygieia stdg. r. feeding serpent held in r. from patera held in l.; above Mt. Gerizim.
- 2. A1-P2. AUB 43, pl. 5, 4, 16.11 g ↑ 28 mm; Rosenberger 3, 75, 12.20 g ↑ 27 mm.
  - Rev. COL/NEAPO City Tyche std. l. between two lions; in extended r. small imperial bust; in l. scepter; above in upper l., Mt. Gerizim.
- 3. A1-P3. \*SNGANS 1013, 13.58 g  $\uparrow$  28 mm; AUB 49, pl. 5, 6 (attributed to Philip II), 12.00 g  $\uparrow$  28 mm; H. Schulman, 6-11 June 1969 (Mabbott), 2686, 28 mm.



- Rev. COLIVL/NEAPOL Eagle stdg., head r. with wings spread, supporting bust of Zeus-Serapis drap. r.
- 4. A1-P4. SNGANS 1015, 15.63 g \( \) 27 mm.
  - Obv. IMPMIVLPHILIPPVSAVG Rad., cuir. with pal. bust r.
  - Rev. COL/[SERG]/ in ex. NEAPOL Philip I, cuir., laur. with pal. stdg. on r.; to l.; in extended r., patera, in l., spear; on l. Philip II veiled and togate stdg. r; in r., patera, in l., scepter; between, lit altar; above, Mt. Gerizim; crescent to l.
- 5. A2-P5. BMCPalestine 128, 14.48 g ↑ 27 mm.
  - Rev. COL/[SE]RG/ in ex. NEAPOL Roma std. l., in extended r., small Nike, l. leaning on shield; to r., Nike stdg. l. crowning with laurel wreath in r.; in upper r., Mt. Gerizim.
- 6. A2-P6. SNGANS 1014, 13.07 g \( \) 27 mm.
  - Rev. COLSERG/NEAPOL Eagle stdg., head l. with wings spread, supporting Mt. Gerizim; enclosed by laurel wreath.
- 7. A2-P7. Rosenberger 3, 76, 12.50 g † 26 mm.
  - Rev. COL/[IVL?]/ in ex. NEAPOL Asclepius stdg. l., in extended r., patera and l. leaning on serpent-staff; Hygieia stdg. r., feeding serpent in r. from phiale in l.; between, cult-statuette of Neapolitan Artemis flanked by two stags; above, Mt. Gerizim.
- 8. A2-P8. \*BMCPalestine 124, 15.29 g † 27 mm.
  - Rev. COLSER/G/NEAPOL Asclepius std. l., in extended r., patera and l. leaning on serpent-staff; Hygieia stdg. r., feeding serpent in r. from phiale in l.; above, Mt. Gerizim.
- 9. A2-P9. BMCPalestine 125, 13.22 g ↑ 27 mm; Münz. u. Med. 25, 17 Nov. 1962, 542; BN 201, 10.89 g ↓ 27 mm.
  - Rev. COLS/ERG/ in ex. NEAPOL Legend ends at 12 o'clock. Marsyas stdg. r., r. raised and wineskin over shoulder; before, eagle stdg., head l. with wings spread; supporting Mt. Gerizim.
- 10. A2-P10. BMCPalestine 119, 11.50 g ↓ 28 mm; Vatican 570, ↑ 29 mm; Sternberg, 25-26 Nov. 1976, 664, 12.92 g ↓ 28 mm; Berlin (Imhoof-Blumer), 28 mm.



- Rev. NEAPOLI/NEOCORO/ in ex. COL. Goddess stdg. l. with r. raised to lips and leaning backwards with altar before; before, crouching god stdg. r. with hound std. r. at feet; flanking on l. male figure stdg. r. with r. raised and on l., female figure with r. raised; above, Mt. Gerizim.
- 11. A2-P11. \*BM (Spink, 1971), 14.86 g † 28 mm.
  - Obv. IMPMIVLPHILIPPVS Rad., cuir. with pal. bust r.
  - Rev. CO/L/SERG/ in ex. NEAPOL Marsyas stdg. r., with r. raised and wineskin over shoulder; to r., eagle stdg., head l. with wings spread, supporting Mt. Gerizim.
- A3-P12. BMCPalestine 118, 12.65 g ↓ 27 mm; SNGANS 1010, 14.61 g ↓ 27 mm; \*Vienna, Kunsthistorisches Museum 36,402, 13.36 g ↑ 30 mm; BN 202, 14.32 g ↑ 27 mm.
  - Rev. COL/SERG/NEAPOLI enclosed within laurel wreath; to r., small vine wreath.
- 13. A3-P13. \*SNGANS 1016, 13.85 g  $\uparrow$  27 mm; Ashmolean, 13.20 g  $\downarrow$  27 mm.
  - Rev. [COL]/SERGNEAPO Roma/Athena stdg. r. sacrificing with extended r. over altar; on l., Nike adv. r., supporting Mt. Gerizim.
- 14. A3-P14. Rosenberger 3, 99 (attributed to Philip II), 14.10 g † 28 mm.
  - Rev. COL/IVL/ in ex. NEAP Asclepius std. l., in extended r., patera and l. leaning on serpent-staff; Hygieia stdg. r., feeding serpent in r. from phiale in l.; between, incense altar; above, Mt. Gerizim.
- 15. A3-P15. \*BMCPalestine 127, 13.54 g ↑ 27 mm; SNGANS 1012, 13.06 g ↓ 27 mm.
  - Obv. IMPMIVLPHILIPPVSAVG Rad., cuir. with pal. bust r.
- 16. A4-P15. *BMCPalestine* 126, 15.75 g  $\downarrow$  28 mm; Rome, Museo Nazionale 11786, 14.95 g  $\downarrow$  26 mm.
- 17. A4-P10. SNGANS 1011, 12.61 g ↓ 26 mm; Rosenberger 3, 77, 12.80 g ↓ 27 mm.



- Obv. IMPCMIVLPH/ILIPPOPFAVG Laur., cuir. with pal. bust r. Rev. NEAPO/LIVLCOL Wolf and twins l.; above, Mt. Gerizim.
- 18. A5-P16. BN 200, 14.74 g \, 27 mm.
  - Rev. NEAPOL/NEOCORO. in ex. COL Marsyas stdg. l., with r. raised and wineskin over shoulder; to l., eagle stdg., head l. with wings spread, supporting Mt. Gerizim; in field, star.
- 19. A5-P17. BMCPalestine 120, 14.49 g ↑ 27 mm; Rosenberger 3, 83, 12.40 g ↑ 27 mm.
  - Rev. NEA/POLI/NECORO/ in ex. COLON Zeus std. front, in extended r., orb (?) and in l., scepter; on l. Athena stdg. r., in r., spear and l. leaning on shield; Hera stdg. r., in extended r., patera and l., scepter.
- 20. A5-P18. *BMCPalestine* 122, 15.03 g ↑ 28 mm; \*Vienna, Kunsthistorisches Museum 32,094, 13.82 g ↑ 27 mm.
  - Rev. NEAPOLI/NEOCOR/ in ex. COL Helmeted Athena (?) in long chiton stdg. front, with r. foot on uncertain object; on r., female figure stdg. l., r. raised and in l. scepter (?); on l., male figure stdg. r., in short chiton, r. raised as if addressing the male figure on far l. adv. r.; in upper l., Mt. Gerizim.
- 21. A5-P19. BMCPalestine 123, 17.88 g ↓ 27 mm; Rosenberger 3, 82, 15.10 g ↓ 27 mm.
  - Rev. NEAPO/L/[NEOCORO]/ in ex. COL Similar.
- 22. A5-P20. SNGANS 1017, 15.79 g \( \) 26 mm.
  - Rev. NEAPOLI/N/EOCORO/ in ex. COL Nude male figure wearing crested helmet and chlamys stdg. r. with r. extended, l. foot on rock; to r., stdg. female figure with r. raised to lips, between, spear planted downwards; above, Mt. Gerizim.
- 23. A5-P21. H. Schulman, 6-11 June 1969 (Mabbott), 2687, 28 mm.



- Obv. IMPCMIVLPHILIPPOPFAVG Laur., cuir. with pal. bust r.
- Rev. COL/SERG/ in ex. NEAPOL Legend starts at 12 o'clock. Marsyas stdg. l., with r. raised and wineskin over shoulder; to l., eagle stdg., head l. and wings spread, supporting Mt. Gerizim.
- 24. A6-P22. BMCPalestine 121, 13.31 g \ 29 mm.
  - Rev. COL/[SE]RGIVL/ in ex. [NEAPOL] Wolf and twins r.; above, Mt. Gerizim.
- 25. A6-P23. Rosenberger 3, 80, 15.60 g † 27 mm.
  - Rev. COL/SERG/ in ex. NEAPOL Similar, but 1.
- 26. A6-P24. \*SNGANS 1018, 14.93 g \ 28 mm; Ashmolean, 14.69 g \ 25 mm.
  - Rev. COLIVL/SERG/NEAPOL Eagle stdg. head l. with wings spread, supporting tabula ansata.
- 27. A6-P25. SNGANS 1019, 16.29 g \ 29 mm; Vatican 572, \ 29 mm.
  - Rev. COLIVL/SERG/NEAP Similar.
- 28. A6-P26. Rosenberger 3, 81, 11.80 g † 29 mm.
  - Rev. COL/SERG/NEAPOL Similar.
- 29. A6-P27. Vienna, Kunsthistorisches Museum 22,529, 11.99 g † 29 mm.
  - Obv. IMPCMIVLPHIL/IPPOPFAVG Laur., cuir. with pal. bust r. Rev. COLSERGNEAPOL Two emperors, each laur. and togate, stdg. face to face, each with patera in r. and scepter in l.; between, lit altar; above, Mt. Gerizim.
- 30. A7-P28. Rosenberger 3, 79, 12.70 g \(\frac{1}{26}\) mm.
  - Rev. COLSER/G/NEAPOL Similar.
- 31. A7-P29. H. Schulman, 6-11 June 1969; (Mabbott), 2688, 28 mm.
  - Rev. COL/SERG/ in ex. NEAP Legend runs from 11 to 1 o'clock. Wolf and twins r.; above, Mt. Gerizim.
- 32. A7-P30. \*BM (Coles, 1931), 15.26 g ↑ 28 mm.



- Rev. COLS[ERGI]ANEAP Eagle stdg., head r. with wings spread, supporting Mt. Gerizim.
- 33. A7-P31. BMCPalestine 116, 13.96 g \ 28 mm.
  - Obv. IMPMIVLPH/ILIPPVSPFAVG Laur., cuir. with pal. bust r. Rev. COLSER/G/NEAPOL Serapis in kalathos and chiton stdg. l. with r. raised and scepter in l.
- 34. A8-P32. \*BMCPalestine 146 (attributed in Philip II), 3.04 g ↑ 19 mm; Rosenberger 3, 86, 5.10 g ↑ 18 mm; Münz. u. Med. 32, 20 Oct. 1966, 431.

## PHILIP I AND PHILIP II

- Obv. IIMMCCPFILIPPISAVGG Laur., cuir. with pal. jugate busts r. Rev. NE[APO]L/NEOCORO/ in ex. COL and palm branch. Wolf and twins l.; above, Mt. Gerizim.
- 35. A9-P33. BN 206, 14.40 g † 26 mm.
  - Rev. [COL]/SERG/ in ex. NEAPOL Wolf and twins 1.; above, Mt. Gerizim; star in lower r.
- 36. A9-P34. BMCPalestine 129, 16.14 g † 25 mm.
  - Rev. NEAPOLI/NEOCOR/ above eagle's wings C/OL Eagle stdg., head l. with wings spread, supporting Mt. Gerizim.
- 37. A9-P35. BMCPalestine 131, 10.60 g ↑ 28 mm; \*BN 207, 17.80 g ↑ 28 mm.

  Rev. Similar.
- 38. A9-P36. \*BMCPalestine 130, 12.65 g ↑ 27 mm; SNGANS 1020, 15.17 g ↓ 27 mm.
  - Rev. COLSERGNEA[POL] Eagle stdg., head l. with wings spread, supporting Mt. Gerizim.
- 39. A9-P37. Rosenberger 3, 89, 11.50 g ↓ 27 mm.
  - Rev. [NEAPOLI]/NEOCORO/ in ex. COL Marsyas stdg. l., with r. raised and wineskin over shoulder; to l., eagle stdg., head r. with wings spread, supporting Mt. Gerizim.
- 40. A9-P38. Rosenberger 3, 91, 22.20 g † 25 mm.



- Rev. COL/SE/RG/ in ex. NEAPOL Similar.
- 41. A9-P39. Rome, Museo Nazionale 111787, 15.90 g ↓ 27 mm.
  - Rev. NEAPOLI. NEOCORO. COL Marsyas stdg. r., with r. raised and wineskin over shoulder; to r., small Nike adv. l. supporting Mt. Gerizim; in field, star.
- 42. A9-P40. BMCPalestine 132, 11.40 g † 27 mm.
  - Rev. NEA[POLI]/[NEOCORO] in ex. COL Two Nikes stdg. face to face supporting laurel wreath enclosing Mt. Gerizim; above, star.
- 43. A9-P41. Rosenberger 3, 90, 13.30 g ↑ 26 mm.
  - Rev. NEAPOL/I/NEOCORO/ in ex. COL Nude male figure wearing crested helmet and chlamys stdg. r. with r. extended, l. foot on rock; to r., stdg. female figure with r. raised to lips; between, spear planted downwards; star in field; above, Mt. Gerizim.
- 44. A9-P42. BMCPalestine 133, 15.44 g  $\uparrow$  27 mm; SNGANS 1021, 16.66 g  $\downarrow$  26 mm; Rosenberger 3, 92, 11.50 g  $\uparrow$  26 mm; \*BN C.B. 1024, 16.17 g  $\uparrow$  26 mm.
  - Rev. NEAPOLI/NEOCORO/ in ex. COL Similar.
- 45. A9-P43. BMCPalestine 134, 15.95 g ↑ 27 mm; Rosenberger 3, 88, 15.30 g ↑ 23 mm; BN 208, 12.61 g ↑ 27 mm.
  - Rev. [NEAP]OLI/NEOCOR/ in ex. COL Female figure stdg. r. with r. raised to lips; to r., Heracles (?) stdg. l. with r. extended and in l. holding kneeling small male captive r.; to r., Serapis adv. l. with r. raised and at side ram l.
- 46. A9-P44. \*Ashmolean, 18.93 g ↑ 27 mm.
  - Obv. IIMMCCPFILIPPISAVGG Laur., cuir. with pal. bust of Philip I on l. face to face laur. cuir. with pal. bust of Philip II on r.
  - Rev. COLSERGNEAPOL Marsyas stdg. l., with r. raised and wineskin over shoulder.
- 47. A10-P45. \*BN 209 = BMCPalestine, pl. 39, 13, 15.57 g † 29 mm; H. Schulman, 6-11 June 1969 (Mabbott), 2690, 28 mm.



- Rev. COL[IVL]SERG/ in ex. NEAPOL Wolf and twins 1.; above Mt. Gerizim.
- 48. A10-P46. Rosenberger 3, 93, 14.30 g \( \) 30 mm. (double struck).

#### OTACILIA SEVERA

- Obv. MOT•SEVERAEAVGMCA Drap. bust r. on crescent, with plait up back of head and wearing stephane.
- Rev. COLIVL/NEAPO Eagle stdg., head r. with wings spread, supporting Mt. Gerizim.
- 49. A11-P47. \*BMCPalestine 135, 16.23 g ↑ 27 mm; Rosenberger 3, 94, 13.30 g ↑ 28 mm.
  - Rev. [COL/IVL]/NEAPOL Zeus std. l., in extended r., small imperial bust, in l., scepter; in lower l., eagle; in upper l. field, Mt. Gerizim.
- 50. A11-P48. H. Schulman, 6-11 June 1969 (Mabbott), 2691, 27 mm.
  - Obv. MOT•SEVERAEAVGMC Drap. bust r. on crescent with plait up back of head, wearing stephane.
  - Rev. C/OL/ in ex. EANPOL Legend runs from 1 to 6 o'clock. Emperor togate as founder plowing pomerium with team of bull and cow r.; above, Mt. Gerizim.
- 51. A12-P49. Rosenberger 3, 98, 13.30 g ↓ 28 mm.
  - Rev. COLI/VL/IASERG/ in ex. NEAPO[L] Similar, but crescent above also.
- 52. A12-P50. \*BN 203, 14.95 g ↑ 30 mm.
  - Rev. COL•SE/RG NEAPOL Eagle stdg., head l. with wings spread, supporting Mr. Gerizim.
- 53. A12-P51. BN 204, 18.22 g † 28 mm.
  - Rev. COLI/VL/FLSERGNEA[OP] City Tyche in turreted crown and long chiton stdg. l., head front, in extended r., model of Mt. Gerizim, l. resting on spear, l. foot on couchant lion.
- 54. A12-P52. BMCPalestine 136, 12.88 g ↑ 29 mm; Rosenberger 3, 95, 15.50 g ↑ 31 mm.



- Rev. COL/SERG/ in ex. NEAPOL Legend runs from 9 to 3 o'clock. Two City Tyches, each turreted, veiled and in long chiton, stdg. face to face, in extended r. of each, small imperial bust and in l., spear, foot of each on couchant lion; between, small Marsyas stdg. r., with r. raised and wineskin over shoulder; above, Mt. Gerizim.
- 55. A12-P53. \*BMCPalestine 137, 17.60 g † 29 mm.
  - Obv. MOTSEVE/RAEAVGMC Drap. bust r. on crescent, with plait up back of head and wearing stephane.
- 56. A13-P5. Rosenberger 3, 97, 13.50 g ↓ 28 mm.
  - Rev. NEA/PO/LINEOCORO/ in ex. COL Quadriga front in which Philip I stdg. r., flanked by Philip II stdg. r. on l. and Otacilia Severa stdg. l. on r.; each with r. raised and scepter in l.; above, Mt. Gerizim.
- 57. A13-P54. \*BMCPalestine 138, 15.42 g \ 28 mm.
  - Rev. NEAPOL/SERG/ in ex. COL Legend runs from 7 to 12 o'clock. Triptolemus stdg. r. in cart drawn by two serpents r.; above, Mt. Gerizim with star to r.
- 58. A13-R55. Berlin = BMCPalestine, pl. 39, 14, 27 mm.
  - Obv. MOSTSEVE/RAE•AVGMC Drap. bust. r. on crescent, with plait up back of head, wearing stephane.
  - Rev. NEAP[OLI]/NEOCORO/ in ex. COL Athena (?) stdg. r., in l. spear; to r., Heracles adv. l., in extended r. patera, in l., club and lion's skin; in upper r., Mt. Gerizim.
- A14-P56. SNGANS 1023, 14.70 g ↑ 27 mm; Intrade (Sternberg, 1959), cast in Winterthur. 14.80 g ↑ 27 mm.
  - Rev. NEAPOLI/NEOCORO/ in ex. COL God adv. r., in extended r., modius, in l., long scepter, before, star; above, Mt. Gerizim; in l. field, downwards AΛΚΑΝΟC.
- 60. A14-P57. \*BN 205, 12.39 g  $\downarrow$  26 mm; Rosenberger 3, 96, 15.90 g  $\downarrow$  27 mm.



### PHILIP II

- Obv. IMPCMIVLPHILIPPOPFDN Rad., cuir. with pal. bust r.
- Rev. NEAPOL/[I]/NEOCORO in ex. COL Nude male figure wearring crested helmet and chlamys stdg. r. with r. extended, l. foot on rock; before, stdg. female figure with r. raised to lips; between, spear planted downwards; star in field; above, Mt. Gerizim.
- 61. A15-P58. AUB 50, pl. 5, 7, 18.31 g  $\downarrow$  30 mm.
  - Rev. NEAPO/L/COL/NEOCORO/ Legend runs from 7 to 2 o'clock. Emperor, laur., cuir. with pal., stdg. l. before altar, in extended r., patera, in l., scepter; to r., Nike stdg. l., crowning with laurel wreath in r.; in upper r., Mt. Gerizim, star below.
- 62. A15-P59. \*Rosenberger 3, 100, 27 mm.
  - Obv. IMPCMIVLPHI/LIPPOPFAVG Laur., cuir. with pal. bust. r. Rev. COLSE/RG/NEA/P Emperor riding r., with r. raised; above, Mt. Gerizim.
- 63. A16-P60. \*BMCPalestine 142, 17.07 g ↓ 28 mm; Sternberg, 25-26 Nov. 1976, 667, 11.74 g 27 mm; Berlin (Imhoof-Blumer) = F. Imhoof-Blumer, Zur Griechischen und Römischen Münzkunde (Genf, 1908), p. 241, no. 1, cast in Winterthur (reverse doublestruck).
  - Rev. COL/SE/RNEA/P Similar.
- 64. A16-P61. AUB 48, pl. 5, 5, 15.18 g  $\uparrow$  28 mm.
  - Rev. COLSER/G[NEAPOL?]/ in ex.[-----] Two emperors, each laur. and togate, stdg. face to face, each with patera in r. and scepter in l.; between, lit altar; above, Mt. Gerizim.
- 65. A16-P62. BMCPalestine 143, 14.90 g ↓ 28 mm.
  - Rev. COLNEA[POL?] Marsyas stdg. r., with r. raised and wineskin over shoulder; to r., eagle stdg., head l. with wings spread, supporting Mt. Gerizim.
- 66. A16-P63. Rosenberger 3, 84 (attributed to Philip I), 12.20 g 7 27 mm.



- Rev. COL/N/[EAPO]L City Tyche in turreted crown and long chiton stdg. l., head front, in extended r., model of Mt. Gerizim and l., resting on spear, l. foot on crouching lion.
- 67. A16-P64. \*BN Y2863413, 17.57 g † 29 mm.
  - Rev. COLSER/GNEAP Eagle stdg., head r. with wings spread, supporting Mt. Gerizim.
- 68. A16-P65. BMCPalestine 140, 14.74 g \( \) 27 mm.
  - Rev. [CO]LSE/R/NEAPO Similar.
- 69. A16-P66. \*BMCPalestine 141, 15.53 g \( \) 27 mm.
  - Rev. COLSE/RGNEAP Similar.
- 70. A16-P67. BN 212, 15.21 g \( \) 28 mm.
  - Rev. COLSE/RGNEAPOL Similar.
- 71. A16-P68. \*Rosenberger 3, 101, 16.40 g \( \) 28 mm.
  - Rev. COL/SE/RGNEAPOL Similar.
- 72. A16-P69. H. Schulman, 6-11. June 1969 (Mabbott), 2689, 29 mm.
  - Rev. C/OLSER/GNEAPOL Similar.
- 73. A16-P70. SNGCop 20, 15.58 g \ 28 mm.
  - Rev. NEAPOLI/NEOCORO over wings of eagle CO/LO Similar.
- 74. A16-P71. Rosenberger 3, 74 (attributed to Philip I), 15.60 g \( \) 27 mm.
  - Rev. COLNEA[POL?] Marsyas stdg. r. with r. raised and wineskin over shoulder; before, eagle stdg., head l. with wings spread, supporting Mt. Gerizim.
- 75. A16-P72. Rosenberger 3, 84 (attributed to Philip 1), 12.20 g † 27 mm.
  - Rev. [-----]/N/EOCO Similar, but Marsyas stdg. 1.
- 75a. A16?-P72a. Rosenberger 3, 108 (very worn and roughly struck), 8.90 g † 22 mm.



- Obv. IMPCMIVLPHILIPPOFDN Laur., cuir. with pal. bust r.
- Rev. NEAPO/LI/N/EOCORO in ex. COL Emperor togate as founder ploughing pomerium with team of bull and cow r.; above, Mt. Gerizim; crescent to r.
- 76. A17-P73. SNGANS 1030, 16.01 g ↑ 27 mm; Rosenberger 3, 105, 16.60 g ↑ 27 mm; BM, 13.10 g ↑ 25 mm.
- 77. A17-P54. BN 215, 16.40 g \ 27 mm.
  - Rev. NEA[POL]/NEOCORO/ in ex. COL Wolf and twins l.; above, Mt. Gerizim.
- 78. A17-P74. BN 210, 11.62 g † 29 mm.
  - Rev. [NEAPOL]/NEOCORO/ in ex. COL Marsyas stdg. l., with r. raised and wineskin over shoulder; to l., eagle stdg., head r. with wings spread, supporting Mt. Gerizim; in field, star.
- 79. A17-P75. \*BN 214, 13.57 g † 27 mm.
  - Rev. C/OL/SERG/ in ex. [NEA]PO[L] Marsyas stdg. r., with r. raised and wineskin over shoulder; to r., eagle stdg. with wings spread, supporting Mt. Gerizim.
- 80. A17-P76. SNGANS 1029, 13.13 g ↓ 26 mm.
  - Rev. ----/NEAPO[L] flanking eagle's head CO/L Mt. Gerizim; beneath, head of eagle 1.
- 81. A17-P77. \*Munich, 17.25 g † 25 mm.
- 82. A17-P55. Rosenberger 3, 102, 15.30 g † 25 mm.
  - Obv. IMPCMIVLPHELIPPOPFAVG Laur., cuir. with pal. bust r. Rev. IMPCMIVLPHILIPPOPFAVG Laur., cuir. bust of Philip I r.
- - Rev. [MOTSEV]ER/AEAVGCMCA Drap., veiled bust of Otacilia Severa r. flanked by C/N.
- 84. A18-P79. \*Münz. u. Med. 32 (1962) 429, 16.11 g \ 28 mm.



- Rev. COLIVL/NEAPOL Eagle stdg., head l. with wings spread, supporting Mt. Gerizim.
- 85. A18-P80. SNGANS 1024, 15.51 g ↓ 27 mm; SNGANS 1025, 12.49 g ↓ 27 mm; Rosenberger 3, 85 (attributed to Philip I), 9.50 g ↑ 27 mm; \*BN C.B. 1025, 19.06 g ↑ 27 mm.
  - Rev. [CO]LIVL/NEAPOL Similar.
- 86. A18-P81. BN 213, 11.73 g † 27 mm.
  - Rev. COL/NEAPOL Ares/Warrior stdg. l., r. leaning on shield, in l., spear; in upper l., Mt. Gerizim.
- 87. A18-P82. SNGANS 1027, 11.50 g † 27 mm.
  - Rev. COLIVL/NEAPO Similar except Ares stdg. r. and Mt. Gerizim in upper r.
- 88. A18-P83. Vatican 569, 1 28 mm.
  - Rev. COLIVL/NEAPOL Zeus stdg. l., in extended r., small imperial bust, in l., scepter; in lower l., eagle; in upper l., Mt. Gerizim.
- 89. A18-P84. SNGANS 1026, 13.13 g ↑ 27 mm; Hunter 3, p. 279, no. 8 (attributed to Philip I), ↑ 28 mm.
  - Rev. [COL]IVL/NEAPOL Asclepius stdg. l., in extended r., patera and l. leaning on serpent-staff; Hygieia stdg. r. feeding serpent in r. from phiale in l.; above, Mt. Gerizim.
- 90. A18-P85. Rosenberger 3, 103, 12.20 g ↑ 28 mm.
- 91. A18-P4. Rosenberger 3, 78 (attributed to Philip I), 13.80 g \( \) 28 mm.
  - Obv. IMPIVLPHILIPPVSAVG Laur., cuir. with pal. bust r.
  - Rev. COLSER/G/NEAPOL/ in ex., star. Nude male figure wearing crested helmet and chlamys stdg. r. with r. extended, l. foot on rock; to r., stdg. female figure with r. raised to lips; between spear planted downwards; above, Mt. Gerizim.
- 92. A19-P86. Berlin = \*BMCPalestine, pl. 39, 15, cast in Winterthur, 37 mm.



- Rev. COL/SERG/ in ex. NEAPOL Emperor riding 1. with r. raised; above, Mt. Gerizim.
- 93. A19-P87. \*Vatican 571, \( \) 27 mm.
  - Rev. COL/IVL/ in ex. NEAP Legend starts at 9 o'clock. Wolf and twins r.; above, Mt. Gerizim.
- 94. A19-P88. \*SNGANS 1028, 9.49 g ↓ 26 mm; Münz. u. Med. 32, 20 Oct. 1966, 430, 25 mm.
- 95. A19-P34. Rosenberger 3, 104, 14.70 g \ 28 mm; BN 211, 13.46 g \ 29 mm.
  - Rev. COLSERG/NEAPOL Eagle stdg., head l. with wings spread, supporting Mt. Gerizim.
- 96. A19-P89. \*BMCPalestine 139, 14.22 g \ 27 mm; Vatican 573, \ 29 mm.
  - Rev. COLIVLN/E[APOL?] City Tyche stdg. r. between two lions, in extended r., small imperial head (?), in l., scepter; above, Mt. Gerizim.
- 97. A19-P90. \*BN, Vogüé 417, † 26 mm.
  - Obv. IMPCMIVLPHILIPPO•F•D•N Laur., cuir. bust r. with slight drap over l. shoulder.
  - Rev. COL/SERG/ in ex. NEAPOL Marsyas stdg. l., with r. raised and wineskin over shoulder; to l., eagle, head l. with wings spread, supporting Mt. Gerizim.
- 98. A20-P91. BMCPalestine 144, 13.74 g 7 29 mm.
  - Rev. SERG/ in ex. NEAPOL Legend begins at 1 o'clock. Similar.
- 99. A20-P92. Rosenberger 3, 107, 12.90 g † 27 mm.
  - Rev. COL/SERG/ in ex. NEAPOL Two City Tyches each with turreted crown, veiled and in long chiton, stdg. face to face, in extended r. of each, phiale, in l., scepter and with one foot on couchant lion; between, lit altar; above, Mt. Gerizim.
- 100. A20-P93. \*BMCPalestine 145, 15.29 g ↑ 29 mm.



- Obv. IMPMIVLP[HILIPP-----AV]G Laur., cuir. with pal. bust r.
- Rev. COLSERGNEAPOLI Eagle stdg., head r. with wings spread, supporting Mt. Gerizim.
- 101. A21-P94. \*Ashmolean, 18.39 g \ 26 mm.
  - Obv. IMPCMPHILIPPVSAVG Laur., cuir. with pal. bust r.
  - Rev. COLSERG/NEAPOL Nike adv.l. holding wreath with both hands.
- 102. A22-P95. BMCPalestine 147, 2.76 g ↑ 15 mm; \*BM. 3.31 g ↑ 16 mm; \*Rosenberger 3, 87, 1.60 g ↑ 15 mm; In trade. (Sternberg, 1959), cast in Winterthur. 2.74 g ↑ 15 mm.

# Coinage After the Suppression of the Colony (Greek Legends)

#### Hostilian

- Obv. AVTK[AI] KVINTVC [-----] Rad., cuir. with pal. bust r. Rev. ----NE---- Male figure in chiton stdg. r. (Asclepius), in extended r., patera (?), in l., unclear object; female figure stdg. (Hygieia?), feeding serpent in r. from phiale in l.; above, Mt. Gerizim and star.
- 103. A23-P96. \*Rosenberger 3, 109, 13.00 g \( \) 24 mm.

#### TREBONIANUS GALLUS

- Obv. AVT-KAI-  $\Gamma$ -OVE-TPEB- $\Gamma$ A $\Lambda$ OC Laur., cuir. with pal. bust r.
- Rev.  $\Phi \land NEAC/\PiO \land EWC$  Eagle stdg., head l. with wings spread, supporting Mt. Gerizim.
- 104. A24-P97. BN, C.B. 1028, 11.73 g  $\uparrow$  25 mm; BN 220 = \*BMCPalestine, pl. 40, 1. 13,08 g  $\uparrow$  25 mm.
  - Rev.  $\Phi \land NEAC/\PiO \land EWC$  Similar.
- 105. A24-P98. BMCPalestine 148, 12.93 g ↑ 25 mm; SNGANS 1033, 8.98 g ↑ 26 mm.



- Rev.  $\Phi \land \cdot N \in AC/\PiO \land \in WC$  Similar.
- 106. A24-P99. BM (Lamplough, 1935), 10.04 g ↓ 25 mm; *Hunter* 3, p. 280, no. 9 (attributed to Volusian), 25 mm.
  - Rev.  $\Phi \land NEAC/\PiO \land [EWC]$  Similar.
- 107. A24-100. BMCPalestine 149, 12.20 g ↓ 27 mm.
  - Rev.  $\Phi \land N \in AC/\PiO \land \in WC$  Similar.
- 108. A24-P101. BMCPalestine 150, 11.59 g ↓ 25 mm.
  - Rev.  $\Phi \land NEAC/\PiO \land EWC$  Similar.
- 109. A24-P102. \*Athens, National Museum 6181b, 10.86 g \( \) 25 mm.
  - Rev.  $\Phi \land N \in AC/[\Pi O \land E]WC$  Similar, but Mt. Gerizim enclosed by laurel wreath.
- 110. A24-P103. Rosenberger 3, 126 (attributed to Volusian), 11.50 g \( \) 26 mm.
  - Rev. ΦΛΝΕΑC/ΠΟΛΕWC/ΕΠΙCMO/NEW KOP/OY Above, Mt. Gerizim between star on l. and crescent on r.; enclosed by laurel wreath.
- 111. A24-P104. BMCPalestine 154, 9.54 g  $\uparrow$  25 mm; Rosenberger 3, 128 (attributed to Volusian), 10.50 g  $\downarrow$  25 mm.
  - Rev. ΦΛΝΕΑC/ ΠΟΛΕΨC/ΕΠΙCHMOY/NEW KOPO/Y in five lines. Similar.
- 112. A24-P105. BMCPalestine 153, 13.80 g  $\uparrow$  25 mm; SNGANS 1036, 10.06 g  $\uparrow$  26 mm; \*BN 217, 11.54 g  $\downarrow$  26 mm.
  - Obv. AVT·KAI· $\Gamma$ ·OVE·TPEB· $\Gamma$ A $\Lambda$ OC·CEB Laur., cuir. with pal. bust r.
  - Rev.  $\Phi \land \cdot \mathsf{NEAC}/\Pi \mathsf{O} \land \mathsf{EWC}$  City Tyche, with turreted crown and, in short chiton, stdg. l., in extended l., small Mt. Gerizim in r., spear; r. foot on couchant lion (?).
- 113. A25-P106. \*SNGANS 1037, 11.01 g ↑ 25 mm; Rosenberger 3, 110, 11.00 g ↑ 26 mm.



- Rev.  $\neq \Phi \land \land \mathsf{NEAC}/\mathsf{TIO} \land \mathsf{EWC}$  Eagle stdg., head l. with wings spread, supporting Mt. Gerizim.
- 114. A25-P107. SNGCop 21, 10.53 g \( \frac{1}{2} \) mm; \*BN 1026, 12.71 g \( \frac{1}{2} \) 6 mm.
  - Obv. AVT·KAI·Γ·OVI·ΤΡΕΒ·ΓΑΛΟC·CEB Laur., cuir. with pal. bust r.

    ΦΛΝΕΑC/ΠΟΛΕωC Eagle stdg., head l. with wings spread, supporting Mt. Gerizim.
- 115. A26-P108. \*SNGANS 1035, 13.42 g ↑ 24 mm; AUB 52, pl. 5, 8, 10.10 g ↑ 24 mm.
  - Rev.  $\Phi \land NEAC/[\Pi O \land EWC]$  Similar.
- 116. A26-P109. BMCPalestine 151, 11.59 g \( \) 25 mm.
  - Rev.  $\Phi \land N \in AC/[\Pi O \land \in WC]$  Similar, but Mt. Gerizim flanked by star on l. and on r., crescent.
- 117. A26-P110. Rosenberger 3, 113, 10.20 g ↑ 24 mm.
  - Rev. ΦΛΝΕΑC/ΠΟΛΕWC/ΕΠΙCHMOV/NEW KOPO/Y Above, Mt. Gerizim flanked by star on l. and crescent on r.; enclosed within laurel wreath.
- 118. A26-P111. Cambridge (ex Grant), 11.61 g ↓ 24 mm; BN C.B 1029, 9.77 g ↑ 25 mm; \*BN 218, 10.89 g ↑ 25 mm.
  - Rev.  $\Phi \land NEAC/\PiO \land EWC/E\PiICHMO/NEW KOP/OY$  Similar.
- 119. A26-P112. Rosenberger 3, 111, 11.10 g † 24 mm.
  - Obv. AVTKAIΓΟVIBTPIBΓΑΛΛΟCCEB Laur., cuir. with pal. bust r.
  - Rev. ΦΛΝΕΑC/Π/ΟΛΕΨC Two emperors, each laur. and togate, stdg. face to face, each with scepter in l. and shaking r. hands; between, altar and above, star; above, Mt. Gerizim flanked by star on l. and crescent on r.
- 120. A27-P113. Rosenberger 3, 112, 9.80 g ↑ 26 mm.



- Rev. [ΦΛΝΕΑC]/ΠΟΛΕΨC Asclepius stdg. r., r. foot on uncertain object, l. leaning on serpent-staff, in r., patera from which serpent arising before him feeds; Hygieia stdg. r. feeding serpent in r. from patera in l.; above, star and Mt. Gerizim.
- 121. A27-P114. \*BMCPalestine 155, 12.84 g 1 25 mm.
  - Rev. [ΦΛΝΕΑC]/ΠΟΛ/EWCC Neapolitan Artemis stdg. l., r. foot on uncertain object, l. over breast and r. placed on head of small animal on column; to l., Nike adv. r. supporting Mt. Gerizim.
- 122. A27-P115. Rosenberger 3, 114, 13.40 g  $\downarrow$  23 mm; \*BMCPalestine 156, 10.07 g  $\downarrow$  24 mm.
  - Obv. AVTKAI ΓΟ VIBTPIB ΓΑΛΛΟ CCEB Rad., cuir. with pal. bust r.
  - Rev. ΦΛΝΕ/ΑC/ΠΟΛΕΨΟ Distyle shrine within which nude female save for peplos stdg. front, arms extended, at feet, altar; on l., Nike adv. r. supporting Mt. Gerizim; in field, star.
- 123. A28-P116. BMCPalestine 158, 11.44 g  $\downarrow$  25 mm; BM (Hamburger, 1908), 11.57 g  $\uparrow$  27 mm; Gotha, cast in Winterthur, 25 mm; Münz. u. Mcd. 32, 20 Oct. 1966, 432, 24 mm; AUB 54, pl. 5, 9, 10.58 g  $\downarrow$  23 mm; Rosenberger 3, 115, 7.20 g  $\downarrow$  25 mm.
  - Rev. ΦΛΝΕΑC/ΠΟΛΕWC Eagle stdg., head l. with wings spread, supporting Mt. Gerizim, flanked by star on l. and crescent on r.
- 124. A28-P117. BMCPalestine 152, 9.26 g ↓ 25 mm; \*SNGANS 1034, 9.77 g ↓ 25 mm.
  - Obv. AVT. KAI.  $\Gamma$ .  $\Gamma$ . OVIB. TPEB.  $\Gamma$ [A $\Lambda$ AOC. CEB] Rad., cuir. with pal. bust r.
  - Rev.  $\Phi \land N \in AC/[\Pi O \land \in WC]$  Eagle stdg., head 1. with wings spread, supporting Mt. Gerizim.
- 125. A29-P118. \*Munich, 12.01 g † 23 mm.



- Obv. AVTKAIΓOVITPEBΓΑΛΛΟCCEB Rad., cuir. bust l., on l. shoulder, shield, r. holds spear over r. shoulder.
- Rev. ΦΛΝΕΑC/ΠΟΛΕWC Neapolitan Artemis stdg. r., in extended l., patera and r. held over breast; to r., vase from which entwined serpent and palm issue; on r., Nike adv. l. supporting Mt. Gerizim.
- 126. A30-P119. \*SNGANS 1039, 11.84 g  $\downarrow$  24 mm; AUB 57, pl. 5, 12, 7.92 g  $\downarrow$  24 mm; Rosenberger 3, 118, 8.90 g  $\downarrow$  23 mm.
  - Rev.  $\Phi \Lambda N[EAC/\Pi O \Lambda]EWC$  Similar.
- 127. A30-P120. BN 219, 11.88 g \( \) 25 mm.
  - Rev. ΦΛΝ/ΕΑCΠ/ΟΛΕΨC Neapolitan Artemis stdg. l., r. foot on uncertain object, with l. hand over small lion (?) on column; on r., Nike adv. l. supporting Mt. Gerizim; between, wheel.
- 128. A30-P121. Rosenberger 3, 117, 10.30 g \( \) 24 mm.
  - Rev. ΦΛΝΕΑC/[ΠΟΛΕ]WC Nude male figure wearing chlamys stdg. r. with r. extended, l. foot on rock; to r., stdg. female figure l. with r. raised to lips; between, spear planted downwards; above, Mt. Gerizim.
- 129. A30-P122. BMCPalestine 157, 12.96 g † 24 mm.
  - Rev. ΦΛΝΕΑC/ΠΟΛΕWC Nude Zeus, chlamys over 1. shoulder, stdg. 1., in r., Mt. Gerizim, in 1., scepter.
- 130. A30-P123. Rosenberger 3, 116, 10.50 g ↑ 22 mm; Münz. u. Med. 32, 20 Oct. 1966, 433, 24 mm.

#### Volusian

- Obv. AVT·KAIC·Γ·OVI·TPEB·OVOΛΟVCAN Laur., cuir. with pal. bust r.
- Rev.  $\Phi \land N \in AC/\PiO \land EWC$  Eagle stdg. head I. with wings spread, supporting Mt. Gerizim.
- 131. A31-P124. Rosenberger 3, 125, 12.20 g  $\uparrow$  26 mm; Sternberg 25-26 Nov. 1976, 670, 10.22 g  $\downarrow$  25 mm; Vatican 575  $\downarrow$  25 mm.



- Rev.  $\Phi \Lambda \cdot NEAC \cdot / \PiO \Lambda EWC$  Similar.
- 132. A31-P125. BMCPalestine 161, 10.61 g \( \) 25 mm.
  - Rev.  $\Phi \land \land NEAC \cdot / \PiO \land EWC$  Similar.
- 133. A31-P126. \*BN 222, 14.56 g ↓ 26 mm.
  - Rev.  $\Phi \land \cdot NEAC/\PiO \land [EW]C$  Similar.
- 134. A31-P127. BN 160, 10.01 g \ 24 mm.
  - Rev.  $[\Phi \land NEAC]/\Pi O \land EW[C]$  Similar.
- 135. A31-P128. BMCPalestine 162, 9.59 g ↑ 25 mm.
  - Rev.  $\Phi \land \land \mathsf{NEAC} \cdot / \mathsf{TIO} \land \mathsf{EWC}$  Similar.
- 136. A31-P129. BMCPalestine 160, 12.57 g ↓ 25 mm; BN C.B. 1030, 10.56 g ↓ 25 mm.
  - Rev. ΦΛΝΕ/A/CΠΟΛ/EWC Eagle stdg. head l. with wings spread, supporting tabula ansata inscribed EΠΙCHM/OV/NEΩKOP/OV; above, Mt. Gerizim.
- 137. A31-P130. Rosenberger 3, 127, 9.70 g  $\downarrow$  21 mm; AUB 56, pl. 5, 11 (attributed to Trebonianus Gallus), 11.46 g  $\uparrow$  28 mm; \*BN 216,  $\downarrow$  25 mm; BN 223,  $\downarrow$  26 mm., broken.
  - Obv. AVT·KAIC· $\Gamma$ ·OVI·TPEB·OVO $\Lambda$ OCIANO Rad., cuir. with pal. bust r.
  - Rev.  $\Phi \land N \in A[C]/[\Pi O] \land EWC$  Eagle stdg., head l. with wings spread, supporting Mt. Gerizim.
- 138. A32-P131. BN C.B. 1031, 11.79 g ↑ 25 mm.
  - Rev.  $\Phi \land NEAC/\PiO \land EWC$  Similar, but wreath enclosing Mt. Gerizim.
- 139. A32-P132. Rosenberger 3, 122, 9.70 g ↓ 24 mm.
  - Rev.  $\Phi \land NEAC/\PiO \land EWC$  Similar, but star to 1. of Mt. Gerizim, no wreath.
- 140. A32-P138. SNGANS 1032 (attributed to Trebonianus Gallus). 11.00 g  $\downarrow$  24 mm; BMCPalestine 163, 12.84 g  $\downarrow$  24 mm.



- Rev. ΦΛΝΕΑC/ΠΟΛΕWC/ΕΠΙCHMOV/NEW KOP Eagle stdg., head l. with wings spread, supporting tabula ansata between eagle's wings, OY; above, Mt. Gerizim.
- 141. A32-P134. \*BMCPalestine 164, 13.80 g † 25 mm.
  - Rev. ΦΛΝΕ/[AC/ΠΟΛΕΨC] Neapolitan Artemis stdg. l., in extended l., patera and r. held over breast; to l., vase from which entwined serpent and palm issue; on l., Nike adv. r. supporting Mt. Gerizim.
- 142. A32-P135. BN 224, 10.54 g \ 23 mm.
  - *Obv.* [AVT] K[A]--O[V-----] Rad. bust r. *Rev.*  $\Phi \land N \in A[C/\Pi \cap A \in WC]$  Similar.
- 142a. A32?-P136. SNGANS 1038 (very worn piece; attributed to Trebonianus Gallus), 10.93 g  $\uparrow$  25 mm.
  - Obv. AVT·KAI·Γ·OVI·TPEB·OVOΛΟVCIAN Rad., cuir. with pal. bust r.
  - Rev.  $\Phi \land NEAC/\PiO \land EWC$  Eagle stdg., head l. with wings spread, supporting Mt. Gerizim.
- 143. A33-P137. \*Vatican 576, \( \) 25 mm.
  - *Rev.*  $\Phi \land N \in AC/\PiO \land \in WC$  Similar.
- - Rev.  $[\Phi \land NEAC]/\Pi O \land E[WC]$  Similar.
- 145. A33-P139. AUB 62, pl. 6, 1, 14.31 g  $\downarrow$  24 mm.
  - Rev.  $[\Phi \land N \in ]AC/\PiO \land \in WC$  Similar, but star to 1. of Mt. Gerizim.
- 146. A33-P140. \*SNGANS 1031 (attributed to Trebonianus Gallus), 13.05 g \$\frac{1}{25}\$ mm.
  - Obv. AVT·KAI·Γ·OVIB·TPEB·OVOΛΟVCIAN Rad., cuir. with pal. bust r.
  - Rev. ΦΛΝΕΑC/ΠΟΛΕWC Eagle stdg., head l. with wings spread, supporting Mt. Gerizim.
- 147. A34-P141. Rome, Museo Nazionale 111788, 12.30 g \ 24 mm.



- Rev.  $\Phi \Lambda \cdot NEAC/\PiO \Lambda EWC$  Similar.
- 148. A34-P142. \*Rosenberger 3, 123, 9.10 g \ 23 mm.
  - Obv. AVT·KAI·Γ·OVI·TPIB·OVOΛOVCIANOC Rad., cuir. with pal .bust r.
  - *Rev.*  $\Phi \land NEAC/\PiO \land EWC \cdot Mt.$  Gerizim.
- 149. A35-P143. \*SNGANS 1041. 7.31 g ↑ 20 mm; BMCPalestine 165, 5.86 g ↑ 20 mm; Rosenberger 3, 124, 6.50 g ↑ 20 mm.

## Coinage of the Restored Colony (Latin Legends)

## TREBONIANUS GALLUS

- Obv. IMP•C•G•VIB•TRIB•GALLO•AVG Rad, cuir. with pal. bust r.
- Rev. COL/NEAPO/ in ex. LI Wolf and twins r.; above, Mt. Gerizim.
- 150. A36-P144. SNGANS 1040, 13.81 g  $\downarrow$  26 mm; \*BN 221, 10.77 g  $\uparrow$  26 mm; AUB 58, pl. 5, 13, 15.17 g  $\uparrow$  26 mm.
  - Rev. COLNE/APOL Eagle stdg., head l. with wings spread supporting Mt. Gerizim.
- 151. A36-P145. Rosenberger 3, 119, 12.10 g † 27 mm.
  - Rev. COLNE/A/P/OL Nude Poseidon stdg. r., in l., trident, in extended r., dolphin, r. foot on prow; to r., boar stdg. l. with military standard surmounted by eagle l. behind; star between; above, Mt. Gerizim.
- 152. A36-P146. Rosenberger 3, 120, 12.00 g  $\uparrow$  26 mm; \*BM (Coles, 1931) 8.23 g  $\uparrow$  26 mm; Berlin = *BMCPalestine*, pl. 40, 2, 26 mm.
  - Rev. COL/NE/AP/OL City Tyche stdg. l., in extended r., patera, in l., cornucopiae; below, lion running r.; on either side, temple shaped like a cage from each of which emerge cocks r. and l.; above, Mt. Gerizim.
- 153. A36-P147. AUB 55, pl. 5, 10, 14.17 g↑ 25 mm; \*BMCPalestine 159, 11.13 gr ↑ 27 mm.



#### Volusian

- Obv. IMPC. VOLVSIANVSPFAVG. Laur., cuir. with pal. bust r.
- Rev. CO/L/NE/APOL Marsyas stdg. l., with r. raised and wineskin over shoulder; to l., eagle stdg., head l. and wings spread, supporting Mt. Gerizim; above, star.
- 154. A37-P148. BMCPalestine 166, 9.80 g  $\uparrow$  25 mm; BMCPalestine 167, 12.38 g  $\downarrow$  27 mm., pierced; Rosenberger 3, 129, 8.70 g  $\downarrow$  28 mm; BN 225, 12.55 g  $\downarrow$  26 mm; \*SNGANS 1042, 11.38 g  $\downarrow$  26 mm.
  - Rev. In field COL/NEAPOL/I. Serapis in kalathos and long chiton stdg. r., in l., scepter and r. raised; on l., military standard surmounted by eagle r.; between, ram stdg. l. with wheat stalk sprouting before; above, Mt. Gerizim.
- 155. A37-P149, \*BMCPalestine 168, 11.06 g  $\downarrow$  25 mm; BN 226, 14.50 g  $\downarrow$  25 mm; Sternberg, 25-26 Nov. 1976, 671, cast in Winterthur, 9.93 g  $\downarrow$  26 mm; St. Florian, cast in Winterthur, 27 mm.



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# Q.OPPIVS.PR

E. BADIAN

The mysterious bronze coins of Q. Oppius have long inspired varied conjecture, with the allusions and the historical background variously interpreted. This is not worth collecting here.<sup>1</sup>

Michael Crawford, while admitting that we cannot be certain what to make of the coins, and assigning them (de facto) a place in an appendix to his catalogue, refuted some attempts to connect them with C. Caesar or Octavian; he noted that the only significant provenance is Cilicia and that PR would most easily be interpreted as "praetor" and therefore tentatively suggested that we should connect them with "the only known Q. Oppius of the Republic," the proconsul of Cilicia captured by Mithridates at Laodicea. It is the aim of this note to suggest (again, with the caution necessitated by the nature of the evidence) that this solution can be supported, and the time more precisely specified, in the light of a recent item of evidence.

In fact, we now know more about Q. Oppius than when Crawford published his views. He has turned up in two documents preserved at Aphrodisias: one from the time when he was under siege (not yet very tightly, it appears) at Laodicea, early in 88 B.C.; the other a letter by him to Aphrodisias (more precisely, Plarasa-Aphrodisias) after his release that followed the Peace of Dardanus.<sup>2</sup>



<sup>&</sup>lt;sup>1</sup> See M. Crawford, The Roman Republican Coinage 1, pp. 545-46, no. 550; cited hereafter as Crawford.

<sup>&</sup>lt;sup>2</sup> J. Reynolds, Aphrodisias and Rome (London, 1982), Documents 2 and 3: ample and careful discussion at pp. 12-16 and 18-20.

In the second of these documents, strangely and inexplicably, he appears to call himself both proconsul and praetor: Κόιντος "Οππιος Κοίντου νίὸς ἀνθύπατος 'Pωμαίων στρατηγός. It could, obviously, be a mere error on the part of the Greek stonemason who engraved the letter, or on the part of the one who recut it in the second century A.D.3 The title στρατηγός ἀνθύπατος, correctly used in the first of the two letters, may have been erroneously divided in the second. But since the texts are otherwise correct, a reason for this is hard to find.4 Perhaps we ought to consider the possibility that, wrongly (as far as we can tell) rather than rightly, Q. Oppius chose to call himself praetor after his release. We are, in fact, ill informed about the details of acquisition, transformation and termination of imperium (see, e.g., the mysterious provisions in another recent document, the Cnidus law: M. Hassall, M. Crawford and J. Reynolds, "Rome and the Eastern Provinces at the End of the Second Century B.C.," JRS 1974, p. 204, ll. IV 32ff. with comments 213f.), and it is clear that "experts" ranging from Sulla himself to Q. Sertorius to Ap. Claudius Pulcher (Cos. 54 B.C.) could advance individual reinterpretations to suit their interests. It is possible that Q. Oppius (perhaps encouraged by Sulla) had done the same, even though the details escape us.

If we accept this as a hypothesis, the coins find a ready explanation, along Crawford's lines. Oppius had been freed through Sulla's treaty with Mithridates at Dardanus, and it is clear that he owed his actual reinstatement in command to Sulla's gracious recognition. His coins can readily be interpreted to show a Sullan connection. The obverse of a diademed Venus, of course, is a well-known symbol of Sulla's patron deity. It can be found on Sulla's own IMPER ITERVM coins (Crawford 359) and on the obviously Sullan issues Crawford 375 and



<sup>&</sup>lt;sup>3</sup> On the epigraphic facts, see Reynolds (above, n. 2), p. 17. One could, of course, refer to the much-discussed figure of the *ordinator*, on each occasion; but since this makes no essential difference here, I prefer to put the reference in a footnote.

<sup>&</sup>lt;sup>4</sup> Reynolds's own (hesitant) suggestion of Greek prose style as furnishing a reason should not be too seriously considered. A document of this kind was obviously not modelled on textbooks of Greek rhetoric, and shows no other sign of being anything other than standard Roman-hellenistic diplomatic prose. This is precisely what creates the mystery over the title.

<sup>&</sup>lt;sup>5</sup> Rightly pointed out by Reynolds (above, n. 2), p. 19.

376. On Sulla's own coin, she appears to be Venus Victrix, accompanied, for the occasion, by a winged Cupid bearing a palm branch.<sup>6</sup>

Oppius allocates his reverse to a winged Victory bearing a palm branch. And where the Sullan issues (Crawford 375 and 376) show cornuacopiae on their reverses (376 with a laurel wreath), Oppius's Victory, on the two more common types, holds a bowl of fruit, which Crawford plausibly explains as related to the fruit projecting from a cornucopiae (for which, possibly, there would have been no appropriate space on the coin). Crawford notes a connection with Laodicea, the scene of Oppius's defeat and capture: Venus-Aphrodite appears on the obverse of bronze coins of Laodicea around this period (and the head, in some issues, resembles that on some of Oppius's), sometimes with a cornucopiae reverse.7 This seems highly convincing; but the intervention of Victory might nonetheless draw our attention to the Sullan coins noted above: Sulla's victory, clearly, was to bring peace and plenty. The combination of allusions, local and imperial-personal, might suit Oppius, who emerges from the documents as a man taking an interest in the communities under his charge.

None of the types, of course, is peculiar to Sulla, or, for that matter, to Laodicea. All except the bowl of fruit (perhaps, as I have suggested; due to technical reasons) can be paralleled on the coinage of the Roman Republic. In particular, as has long been known, they can be found (perhaps not by accident) on coins of Caesar: a Caesarian attribution for Oppius's coins, shorn of fanciful exaggeration, cannot at present be excluded. But in view of the arguments earlier advanced by Crawford for a Mithridatic context, we may now legitimately note the close resemblance of the particular combinations of types on these coins to the motifs of Sulla's coinage and (I have suggested) we may, at least as a hypothesis, compare the title he appears to use on one of the new documents to support this explanation.



<sup>6</sup> On the symbols, see Crawford 2, p. 731.

<sup>&</sup>lt;sup>7</sup> See *BMCPhrygia*, pp. 283-88, with pl. 34.

<sup>&</sup>lt;sup>8</sup> Such as, e.g., Grueber's suggestion (BMCRR 1, p. 541) that the capricorn on the coin (which he regards as Caesarian) refers to the adoption of Octavian-which was in fact, as is well known, testamentary.

The capricorn remains a mystery. As far as I know, it is the only one (other than as a control mark) on the Republican coinage. It would be interesting to know what Sulla's birth sign was. As far as I have been able to see, the information is not recorded, even though the fact of his superstition is amply attested, and this must have been a major part of a character such as his. If it should ever turn out to be Capricorn, this would not only give us the first such use of a personal astrological reference on a Republican coin (which would again fit in well enough with Sulla's other innovations), suitably obscure somewhere in Greek Asia, but would invite further speculation on Augustus. Though at present this must remain fancy, it is not impossible that relevant information will yet appear.

- <sup>9</sup> Michael Crawford points out to me that the capricorn, though not strictly speaking a control mark, is in fact close to it, in so far as we can assign it a function. In any case, the symbols are astrological, and both the capricorn and the aries (less common, it seems) ought to have a function. It would be tempting to regard them as a sun sign and a moon sign, for the same person.
- <sup>10</sup> I should like to thank Mr. Crawford (who, of course, bears no responsibility for my suggestions) for looking at this note and making helpful comments.



# THE MESAGNE HOARD

(PLATES 16-19)

CHARLES HERSH AND ALAN WALKER

In 1979 or 1980, probably the latter, a hoard of approximately 5,940 Roman Republican denarii was unearthed at Mesagne in Calabria. This town is situated southwest of Brindisi (ancient Brundisium), along the last stretch of the ancient Via Appia as it runs from Taranto (ancient Tarentum) to its terminus by the shores of the Adriatic Sea. During the Republic, Brundisium was the main Roman port of embarkation both to Greece and the East.

This find is of especial interest and importance, as there are no other really sizeable hoards from the late 70s, 60s and 50s of the first century B.C. According to Crawford's dating,<sup>1</sup> the most recent available, the Mesagne Hoard must have been buried ca. 58 B.C. Again using Crawford as our source, in the years between the burial of the Roncofreddo Hoard in ca. 75 B.C., which contained approximately 6,000 silver coins, and Cadriano in ca. 49 B.C., of which we have a record of about 3,000 denarii of an estimated total of some 80,000 originally, only a few hoards exceeded 1,000 pieces.<sup>2</sup> These included Frascarolo (about 1,100 coins), Maccarese (1,226 denarii), Pontecorvo (1,234 silver pieces) and Cosa (2,004 denarii), all four buried in ca. 74 B.C., as well as Casaleone (1,031 silver coins), deposited in 51 B.C.

<sup>&</sup>lt;sup>1</sup> M. H. Crawford, Roman Republican Coinage (Cambridge, 1974); cited hereafter as Crawford.

<sup>&</sup>lt;sup>2</sup> RRCH 298, 357, 302, 309, 311, 313, 351.

As Grueber stated, "The dearth of information supplied by finds, the constant changes in the types of the denarius, and the apparently rapid variations in its fabric, render the classification of the issues year by year... somewhat conjectural." Again he noted, "in order to ascertain the sequence of the issues during this period (72–50 B.C.) we have to depend in a great degree on the evidence of the coins themselves, their fabric and style, and on what information can be gleaned from the history of the moneyers."

The contents of the Mesagne Hoard have been listed according to Crawford's arrangement; a reference to Sydenham<sup>5</sup> is also included. Issues discussed under "Control-marks and Type Varieties," following the inventory of the hoard, are marked with an asterisk.

#### **CATALOGUE**

				No. of
Moneyer	C. Date	C. Ref.	Syd. Ref.	Coins
(CRESCENT)	194–190	137/1	265; 314; 352	2
P. MAENIUS	194-190	138/1	351	1
CN. DOMITIUS	189-180	147/1	349	1
(CORNUCOPIAE)	179–170	157/1	340	1
(GRIFFON)	169-158	182/1	283	2
ANONYMOUS - VICTORY	157–156	197/1a	376	5
IN BIGA	157-156	197/1b	431; 439	2
ANONYMOUS - DIOSCURI	157-156	198/1	207; 229; 273;	1
			311; 338	
ATILIUS SARANUS	155	199/1a	377	3
PINARIUS NATTA (NATA)	155	200/1	382	2
C. SCRIBONIUS	154	201/1	380	4
C. MAIANIUS	153	203/1a	427	3
	153	203/1b	_	1

<sup>&</sup>lt;sup>3</sup> BMCRR, p. 412.



<sup>4</sup> BMCRR, p. 411.

<sup>&</sup>lt;sup>5</sup> E. Sydenham, The Coinage of the Roman Republic (London, 1952); cited hereafter as Syd.

Moneyer	C. Dale	C Paf	Sud Daf	No. o
Moneyer	C. Date	C. Ref.	Syd. Ref.	Coin:
L. SAUFEIUS	152	204/1	384	4
P. CORNELIUS SULLA	151	205/1	386	2
SAFRA	150	206/1	388	1
DECIMIUS FLAVUS (FLAVS)	150	207/1	391	:
PINARIUS NATTA (NATTA)	149	208/1	390	8
M. ATILIUS SARANUS	148	214/1b	398; 398b	:
	148	214/1c	398c; 398d	:
Q. MARCIUS LIBO	148	215/1	395	4
L. SEMPRONIUS PITIO	148	216/1	402; 402a	4
C. TERENTIUS LUCANUS	147	217/1	425	3
C. ANTESTIUS	146	219/1e	411	1
M. JUNIUS SILANUS	145	220/1	408; 412	3
ANONYMOUS - DIANA IN BIGA	143	222/1	438	:
OF STAGS		·		
C. CURIATIUS TRIGEMINUS	142	223/1	436	
L. JULIUS	141	224/1	443	:
C. TITINIUS	141	226/1a	445	
C. VALERIUS FLACCUS	140	228/1	441	
	140	228/2	440	2
C. RENIUS	138	231/1	432	;
CN. GELLIUS	138	232/1	434; 434a	
P. AELIUS PAETUS	138	233/1	455	;
TI. VETURIUS	137	234/1	527	•
SEX. POMPEIUS	137	235/1c	461a	1
M. BAEBIUS TAMPILUS	137	236/1a	489	
	137	236/1e		1
	137	236/1f	489	
CN. LUCRETIUS TRIO	136	237/1a	450	
L. ANTESTIUS GRAGULUS	136	238/1	451; 465	•
c. SERVILIUS	136	239/1	525	;
C. CURIATIUS TRIGEMINUS	135	240/1a	459	:
L. TREBANIUS	135	*241/1a, 1b	456	:
C. MINUCIUS AUGURINUS	135	242/1	463	:
ri. Minucius Augurinus	134	243/1	494	
C. ABURIUS GEMINUS	134	244/1	490	
M. MARCIUS	134	245/1	500	
P. CALPURNIUS	133	247/1	468	
L. MINUCIUS	133	248/1	470	
P. MAENIUS ANTIATICUS	132	249/1	492	1
M. ABURIUS GEMINUS	132	250/1	487	10
L. POSTUMIUS ALBINUS	131	252/1	472	



Moneyen	C. Data	C Def	Cud Def	No. of
Moneyer	C. Date	C. Ref.	Syd. Ref.	Coins
L. OPIMIUS	131	253/1	473	4
M. OPIMIUS	131	254/1	475	1
M. ACILIUS	130	255/1	511	2
Q. CAECILIUS METELLUS	130	256/1	509	9
M. VARGUNTEIUS	130	257/1	507	11
Q. MARCIUS PHILIPPUS	129	259/1	477	4
r. CLOULIUS	128	260/1	516	3
CN. DOMITIUS	128	261/1	514	7
(ELEPHANT'S HEAD)	128	262/1	496	5
M. CAECILIUS METELLUS	127	263/1a	480	4
	127	263/1b	480a	9
C. SERVILIUS	127	264/1	483	6
Q. FABIUS MAXIMUS	127	265/1	478	3
C. CASSIUS	126	266/1	<b>502</b>	3
r. QUINCTIUS FLAMININUS	126	267/1	505	5
C. CAECILIUS METELLUS	125	269/1	485	1
M. PORCIUS LAECA	125	270/1	513	10
MN. ACILIUS BALBUS	125	271/1	498	1
Q. FABIUS LABEO	124	273/1	532	12
C. PORCIUS CATO	123	274/1	417	6
C. FANNIUS	123	275/1	419	10
M. PAPIRIUS CARBO	122	276/1	423	5
Q. MINUCIUS RUFUS	122	277/1	421	7
C. PLAUTIUS (PLVTI)	121	278/1	410; 414	3
PAPIRIUS CARBO	121	279/1	415	6
M. TULLIUS	<b>12</b> 0	280/1	531	12
M. FURIUS PHILUS	119	281/1	529	<b>2</b> 0
M. AURELIUS	118	282/1	523; 523a	5
L. COSCONIUS	118	282/2	<b>521</b>	2
C. POBLICIUS MALLEOLUS	118	282/3	524	4
L. POMPONIUS	118	*282/4	522; 522a	8
L. PORCIUS LICINIUS	118	282/5	<b>52</b> 0	3
Q. MARCIUS; C. F.; L. R.	118 or 117	283/1a	541	1
M. CALIDIUS; Q. CAECILIUS	117 or 116	284/1a	539	10
METELLUS; CN. FULVIUS	117 or 116	284/1b	539 <b>a</b>	5
CN. DOMITIUS	116 or 115	285/1	535	11
Q. CURTIUS; M. JUNIUS				
SILANUS	116 or 115	285/2	537	15
M. SERGIUS SILUS	116 or 115	286/1	534; 544	38
ANONYMOUS - ROMA SEATED			•	
ON SHIELDS	115 or 114	287/1	530	23



Mannayan	C. Dale	C Def	Sud Dat	No. of Coins
Monneyer	G. Date	C. Ref.	Syd. Ref.	Coins
M. CIPIUS	115 or 114	289/1	546	81
C. FONTEIUS	114 or 113	290/1	555	4
MN. AEMILIUS LEPIDUS	114 or 113	291/1	554	17
P. LICINIUS NERVA	113 or 112	292/1	548	8
L. MARCIUS PHILIPPUS	113 or 112	293/1	551	6
T. DIDIUS	113 or 112	294/1	550	2
L. MANLIUS TORQUATUS	113 or 112	295/1	545	15
CN. CORNELIUS BLASIO	112 or 111	*296/1a-11	561; 561a-e	43
TI. Q (QUINCTIUS)	112 or 111	297/1a	563	2
	112 or 111	*297/1b	563	5
L. CAESIUS	112 or 111	298/1	564	12
AP. CLAUDIUS; T. MANLIUS;	111 or 110	299/1a	570	25
Q. URBINIUS	111 or 110	299/1b	570a	43
C. CLAUDIUS PULCHER	110 or 109	300/1	569	37
P. PORCIUS LAECA	110 or 109	301/1	571	9
L. FLAMINIUS CHILO	109 or 108	302/1	<b>540</b>	61
MN. AQUILLIUS	109 or 108	303/1	557	8
L. MEMMIUS	109 or 108	304/1	558	21
Q. LUTATIUS CERCO	109 or 108	305/1	559	13
L. VALERIUS FLACCUS	108 or 107	*306/1	565	20
MN. FONTEIUS	108 or 107	307/1a	566b	3
	108 or 107	307/1b	566, 566a	2
	108 or 107	307/1c	566, 566a	2
	108 or 107	307/1d	566, 566a	1
M. HERENNIUS	108 or 107	308/1a	567	21
	108 or 107	308/1Ь	567a	27
A. MANLIUS SERGIANUS	108 or 107	309/1	543	1
L. CORNELIUS SCIPIO ASIAGEN	us 106	311/1a	576	3
	106	311/1b	576a	8
	106	311/1c	576Ь	4
	106	311/1d	576Ь	1
C. SULPICIUS	106	312/1	572	3
L. MEMMIUS GALERIA	106	313/1b	574	5
	106	313/1c	574 <b>a</b>	3
L. AURELIUS COTTA	105	314/1b	577	2
	105	314/1c	577a	2
L. THORIUS BALBUS	105	316/1	598	40
L. APPULEIUS SATURNINUS	104	317/3a	578	23
	104	317/3b	578a	18
C. COELIUS CALDUS	104	318/1a	<b>582</b>	17
	104	318/1b	582a	16



Moneyer	C. Date	C. Ref.	Syd. Ref.	No. of Coins
Q. MINUCIUS THERMUS	103	319/1	592	80
L. JULIUS CAESAR	103	*320/1	593; 593a	21
L. CASSIUS CAEICIANUS	102	321/1	594	8
C. FABIUS	102	322/1a	589	7
	102	322/1b	590	4
L. JULIUS	101	323/1	585	9
M. LUCILIUS RUFUS	101	324/1	599	25
L. SENTIUS	101	325/1a	600a	8
	101	325/1b	600	2
C. FUNDANIUS	101	326/1	583	7
M. SERVILIUS	100	327/1	602	6
P. SERVILIUS RULLUS	100	328/1	601	36
P. CORNELIUS LENTULUS	100	329/1a	604a, 604c	2
MARCELLINUS	100	329/1b	604, 604b	3
	100	*329/1d	605	1
CALPURNIUS PISO; Q.	100	330/1a	603	3
SERVILIUS CAEPIO	100	330/1b	603a	2
L. POMPONIUS MOLO	97	334/1	607	6
C. POBLICIUS MALLEOLUS; A.	96	335/1a	611	4
POSTUMIUS ALBINUS; L.	96	335/1b	611a	9
CAECILIUS METELLUS	96	335/1c	611a	2
C. POBLICIUS MALLEOLUS	96	335/2	614	2
	96	335/3a	615	1
	96	335/3b	615	2
	96	335/3c	615a	1
	96	335/3d	615a	6
	96	335/3f	615b	2
	96	335/3g	615c	1
	96	335/3(?)		1
A. POSTUMIUS ALBINUS	96	335/9	613; 613a	1
	96	335/10a	612; 612a	4
C. ALLIUS BALA	92	336/1b	595	7
	92	*336/1c	595	6
D. JUNIUS SILANUS	91	337/1a	644a	3
	91	337/2b		2
	91	337/2e	645c	2
	91	337/2f	645c	4
	91	337/3	646	153
L. CALPURNIUS PISO FRUGI	90	340/1 (No Roma)	663-671	157
	90	*340/1 (Roma	660-662	35
		in monogram)		



M	G D.4	a n 1	G . 1 . D . 1	No. o
Monneyer 	C. Date	C. Ref.	Syd. Ref.	Coins
	90	*340/1 (Roma)	656; 658	7
		(All with obv. head		
		r.; rev. horseman r.)		
Q. TITIUS	90	341/1	691	112
	90	341/2	692	120
C. VIBIUS PANSA	90	*342/3a	683b	1
	90	*342/3b	683; 683a	6
	90	342/4b	685-685b	4
	90	*342/5b	684-684c	193
	90	342/6a	687	1
M. PORCIUS CATO	89	343/1b	596	18
	89	343/1c	596a	8
L. TITURIUS SABINUS	89	344/1a	698	32
	89	344/1b	698a	54
	89	344/1c	698b	10
	89	344/1?	_	1
	89	*344/3 obv.		1
		344/1 rev.		
	89	344/2b	699	58
	89	344/2c	699a	15
	89	344/2?		3
	89	344/3	700-700ь	37
CN. CORNELIUS LENTULUS	88	345/1	702	19
C. MARCIUS CENSORINUS	88	346/1	713	8
	88	346/2	714	5
L. RUBRIUS DOSSENUS	87	348/1	705	4
	87	348/2	706	2
	87	348/3	707	2
L. MEMMIUS GALERIA; C.	87	349/1	712	6
MEMMIUS GALERIA		•		
GARGONIUS; OGULNIUS;	86	*350A/1a	721	3
VERGILIUS		•		
	86	*350A/1b	721a	1
	86	*350A/1c	721b	2
ANONYMOUS	86	350A/2	723	169
M. FANNIUS; L. CRITONIUS	86	351/1	717	5
L. JULIUS BURSIO	85	352/1a	<b>72</b> 8	24
	85	352/1c	728a-728f	34
	85	352/1?		1
MN. FONTEIUS	85	353/1a	724	15
	85	353/1c	724a	15



				No. of
Moneyer	C. Date	C. Ref.	Syd. Ref.	Coins
	85	353/1d	724b	10
	85	353/1 ?	_	1
C. LICINIUS MACER	84	354/1	732	20
P. FURIUS CRASSIPES	84	356/1a	735	7
	84	356/1c	735b	4
	84	356/1d	-	1
C. NORBANUS	83	*357/1a	740	6
	83	357/1b	739	40
L. CORNELIUS SULLA	84-83	359/2	761; 761a	11
P. CREPUSIUS; C. MAMILIUS LIMI	E- 82	360/1b	736a	9
TANUS; L. MARCIUS CENSORIN	ius			
P. CREPUSIUS	82	*361/1b	738	2
	82	*361/1c	738a	70
	82	361/1?		2
C. MAMILIUS LIMETANUS	82	362/1	741	33
L. MARCIUS CENSORINUS	82	*363/1a	737c-737f	2
	82	*363/1b	737a; 737b	1
	82	363/1d	737	52
Q. ANTONIUS BALBUS	83-82	364/1b	742	7
	83-82	364/1c	742a	16
	83-82	364/1d	742b	58
	83-82	*364/1e		1
	83-82	364/1?		4
C. VALERIUS FLACCUS	82	365/1a	747a	1
	82	365/1b	747b	3
	82	365/1c	.747	2
C. ANNIUS; L. FABIUS	82-81	366/1a	748	9
HISPANIENSIS	82-81	366/1b	748a	9
	82-81	366/1c	748b	1
	82-81	366/2a	748c	2
	82-81	*366/3a	748f	1
	82 - 81	366/3b	748g	1
C. ANNIUS; C. TARQUITIUS	82-81	366/4	749	1
L. CORNELIUS SULLA;	82	367/1	_	1
L. MANLIUS TORQUATUS	82	367/3	759	9
	82	367/5	757; 757a	60
M. CAECILIUS METELLUS	<b>82</b> -80	369/1	719	1
c. servilius	82-80	370/1	<b>72</b> 0	6
Q. FABIUS MAXIMUS	<b>82</b> -80	371/1	718	8
A. POSTUMIUS ALBINUS	81	372/1	745	21
	81	372/2	746	33



Moneyer	C. Date	C. Ref.	Syd. Ref.	No. of Coins
	C. Dute	G. Rej.	Syu. Rej.	Coms
Q. CAECILIUS METELLUS PIUS	81	374/1	750	34
	81	374/2	751	17
Q.	81	375/2	755	13
C. MARIUS CAPITO	81	378/1a	744	2
	81	*378/1b	744a	5
	81	*378/1c	744b	26
L. PROCILIUS	80	379/1	771	44
	80	379/2	772	25
C. POBLICIUS	80	380/1	768	26
C. NAEVIUS BALBUS	79	382/1a	769	18
	79	382/1b	769a; 769b	74
TI. CLAUDIUS	79	383/1	770; 770a	73
L. PAPIUS	79	*384/1	773	54
M. VOLTEIUS	78	385/1	774	26
	78	385/2	775	16
	78	*385/3	776	22
	78	*385/4	777	18
L. CASSIUS LONGINUS	78	386/1	779	16
L. RUTILIUS FLACCUS	77	387/1	780	59
P. SATRIENUS	77	388/1a	781	1
	77	388/1b	781a	19
L. RUSTIUS	76	389/1	782	29
L. LUCRETIUS TRIO	76	390/1	783	19
	76	<b>39</b> 0/ <b>2</b>	784	23
C. EGNATIUS MAXSUMUS	75	*391/2	788	4
	75	*391/3	787	12
L. FARSULEIUS MENSOR	75	392/1a	789a	22
	75	392/1b	789	16
CN. CORNELIUS LENTULUS	76-75	393/1a	<b>752</b>	105
	76-75	393/1b	752a	33
	76-75	393/1?		1
C. POSTUMIUS	74	394/1a	785	62
	74	394/1b	785a	1
L. COSSUTIUS SABULA	74	*395/1	790	12
Q. CREPEREIUS ROCUS	72	*399/1a	796	1
L. AXIUS NASO	71	400/1a	794	1
MN. AQUILLIUS	71	401/1	798	112
Q. FUFIUS CALENUS; MUCIUS CORDUS	70	403/1	797	42
T. VETTIUS SABINUS	70	<b>*</b> 404/1	905	10
P. SULPICIUS GALBA	69	406/1	838; 839	28



Moneyer	<i>C</i> .	Date	С.	Ref.	Syd.	Ref.	No. of Coins
C. HOSIDIUS GETA	68		407/	1	90	4	29
	68		407/	2	90	3	121
	68		407/	2 var	90	3a	4
			(No	Spear)			
C. CALPURNIUS PISO FRUGI	67		*408/	1a	84	0-878	30
	67		*408/	1b	84	0-878	168
M. PLAETORIUS CESTIANUS	67		409/	1	80	9	52
(AED. CVR)	67		409/	2	80	8	31
L. ROSCIUS FABATUS	64		*412/	<b>1</b>	91	5	138
L. CASSIUS LONGINUS	63		•413/	<b>'1</b>	93	5	108
L. FURIUS BROCCHUS	63		414/	<b>'1</b>	90	2	99
L. AEMILIUS LEPIDUS PAULLUS	62		415/	<b>'1</b>	92	6	279
L. SCRIBONIUS LIBO	62		416	1a	92	8	237
	62		416	/1b	92	8	17
	62		416	/1 <b>c</b>	92	8	14
L. AEMILIUS LEPIDUS PAULLUS;	62		417	/1a	92	7	12
L. SCRIBONIUS LIBO	62		417/	1b	92	7	2
M. AEMILIUS LEPIDUS	61		419	1a	82	9	2
	61		419/	1b	83	0	2
	61		419/	1c	83	0 <b>a</b>	1
	61		419/	'1 <b>d</b>	83	0 <b>b</b>	2
M. AEMILIUS SCAURUS;	58		*422/	'1a	91	2	13
P. PLAUTIUS HYPSAEUS	58		*422/	/1b	91	3	182
	58		*422/	1b var	91	4	1
			(No	AED CVR)			
			•	TOTAL	5,94	0	

## CONTROL-MARKS AND TYPE VARIETIES

241/1b L. TREBANIUS

Rev. R for B. TRERANIUS (Plate 16, 1)

282/4 variety L. POMPONIUS; L. LICINIUS CRASSUS; CN. DOMITIUS AHENOBARBUS.

Rev. (in part) CN. OM (Plate 16, 2)



## 296/ CN. CORNELIUS BLASIO

	Obv. Control	Rev. Control	No. Coins
1a	Caduceus	•	3
1b	Star	Crescent	3
1c	Bucranium	O or ⊙	8
1d	Prow-stem	Π	8
1e	Wreath	Υ	5
1f	Spearhead up	Φ	2
1g	Spearhead down	Ψ	
	or dagger		2
1h	Palm-branch	BLA Monogram	5
1i	Wheat-ear	A	1
1j	Tripod	Cornucopiae	2
<b>11</b>	Thyrsus	Torch	1
Unc.			3
			$\overline{43}$

## 297/ TI Q (TI. QUINCTIUS?) Varieties include:

1b. Rev. Rat r.; above in field, ·Z. This issue marks the only use of the Latin letters Y and Z as control-marks in the Republican series. (Plate 16, 3)

306/1 variety L. VALERIUS FLACCUS Rev. (in part) ELACCI (Plate 16, 4)

#### 320/1 L. JULIUS CAESAR. Varieties include:

Control-mark on obv. and rev., ·F. Obv. CAESAR. These dies are different than another coin, also with control-mark ·F on both obv. and rev., where the obv. reads CAESA. This second coin does not come from this hoard. Crawford is in error as he states that "No pair of control-marks has more than one pair of dies." (Plate 16, 5 and 6)

<sup>6</sup> Crawford, p. 325.



#### 329/1d P. CORNELIUS LENTULUS MARCELLINUS

Obv. control-mark at r., N; rev. control-mark on l. in field, N. (Plate 16, 7)

#### 336/1c C. ALLIUS BALA Varieties include:

Obv. control-mark, A; rev. control-mark, fly. New variety. (Plate 16, 8)

## 340/1 L. CALPURNIUS PISO FRUGI Varieties include:

a Obv. no control-mark; rev. control-mark above in field, round shield. New variety (Syd. 658). (Plate 16, 9)

b Obv. control-mark at 1., LXXXV; rev. control-mark above in field, CVI. Rider r. holds palm-branch. Another specimen with line below moneyer's name on reverse, above ROMA monogram. (Syd 661). (Plate 16, 10)

#### 342/ C. VIBIUS PANSA Varieties include:

3a Obv. control-mark below chin at r., Palm-branch.

3b Obv. control-marks below chin at r.:

- 1. Lizard
- 2. Human ear. New variety. (Plate 16, 11)
- 3. Flower.
- 4. S· (Plate 16, 12)
- 5b Obv. control-mark below chin at r., tanner's knife. New variety. (Plate 16, 13).

#### 344 L. TITURIUS SABINUS

Hybrid denarius, not cited by Crawford, appears to be unpublished. Coin is good silver, not plated.

Obv. as C. 344/3; rev. as C. 344/1. (Plate 16, 14)

#### 350A GARGONIUS; OGULNIUS; VERGILIUS

1a Rev. control-marks above in field include:

- 1. M (Plate 16, 15)
- 2. P



1b Rev. control-mark above in field:

1. 1 (?)

1c Rev. control-marks above in field include:

1. C (Plate 17, 16)

## 357/1a C. NORBANUS

Obv. control-marks at 1. include: XXII. This die is different than a specimen of 357/1b in the Hersh Coll. with the same obv. control-mark, not from the hoard. (Plate 17, 17 and 18)

## 361/ P. CREPUSIUS Varieties include:

	Ol	bv. at l.	Obv. at r.	Rev. above at	l. in field
1b			E	X	
1c	1	Α	Feather	VI	
	2	N	Feather	XXV	
	3	В	Thunderbolt	XXXV	
	4	F	Bunch of grapes	TXXXX	
	5	R	Wheat-ear	CVI	(Plate 17, 19)
	6	F	Bunch of grapes	CXXVIIII	New variety
					(Plate 17, 20)
	7	D	Thyrsus	CTAII	
	8.	F	Thyrsus	CTXXAIII	
	9	D	Poppy-head	CTXXXIIII	(Plate 17, 21)
	10	E	Poppy-head	CTXXXXAII	(Plate 17, 22)
	11	K	Bird	CCVII	
	12	D	Crescent	CCXXXVIIII	(Plate 17, 23)
	13	T	Bidens	CCCXVIII	
	14	0	Branch	CCCXXXXV	New variety
					(Plate 17, 24)
	15	M	Cornucopiae	CCCTXXXXIII	
	16	G	Turtle	CCCCXXVII	New variety
					(Plate 17, 25)
	17	D	Altar	CCCCXXXXIII	New variety
					(Plate 17, 26)



18	Н	Wing	CCCCXXXXVI	Il New variety
				(Plate 17, 27)
19	F	Conch Shell	CCCCTXXXA	New variety
				(Plate 17, 28)
20	I	Palm-branch	DXI	

#### 363/ L. MARCIUS CENSORINUS Varieties include:

1a Obv. control-mark at r, fish; rev. control-mark at r., P. New variety. (Plate 17, 29)

1b Obv. control-mark at r., stork or heron. (Plate 17, 30)

#### 364/1e Q. ANTONIUS BALBUS

Obv. control-mark at r. below chin, B.; rev. control-mark below quadriga in field, O. New combination; hybrid in excellent condition, a plated denarius which can only be detected due to flaw in edge serration. (Plate 18, 31)

#### 366/3a C. ANNIUS; L. FABIUS HISPANIENSIS

Obv. control-mark at l. behind head, E. (Plate 18, 32)

### 378/ C. MARIUS CAPITO

1b varieties include:

Obv. control-mark before head, XXVIII; rev. same control-mark above yoke of oxen, XXVIII; control-mark in exergue, grasshopper. 1c varieties include:

Obv. above head		Obv. at right	Rev. above in field	
1	XXXXIII	Prow-stem	XXXXIII	
2	TXXAIII	Stilus or Staff	TXXAIIII	
3	TXXXII	Tripod	TXXXII	New variety.
		,		(Plate 18, 33)
4	С	Wolf's head	С	
5	CXXXXIII	Ram's head	CXXXXIII	Crawford has misidentified obv. symbol. (Plate 18, 34)



384/1 L.	PAPIUS Variet	ties include:		
C. Die	Babelon <sup>7</sup>	<b>BMCRR</b>	No.	<b>Description</b>
pairing	Die Pair-	Die Pair-	Coins	
No.	ing No.	ing No.		
3	24	3	1	
5	-	5	1	
9	5	9	3	
11	_	11	2	
13	35	13	1	
14	78	14	1	
15	_	15	1	
16	129	16	1	
21	81	21	1	
25	84	25	1	
26	36	<b>2</b> 6	1	
30	_	30	1	
34	124	34	1	
36	107	36	1	
38	45	38	1	
40	137	40	1	
48	92	48	1	
51	98	51	1	
58	_	58	1	
64	77	64	2	Rev. symbol, forepart
				of bull.
68	46	68	2	
69	2	69	1	
70	61	70	1	
79	121	79		Obv. symbol, boring
		, ,		tool; rev. symbol, chi-
				sel.
87	40	87	1	
01	40	07	1	



<sup>&</sup>lt;sup>7</sup> E. Babelon, Description historique et chronologique des monnaise de la République romaine (Paris, 1885-86).

384/1 L.	<b>PAPIUS</b> (cont	tinued)		
C. Die	Babelon	BMCRR	No.	Description
Pairing	Die Pair-	Die Pair-	Coins	
No.	ing No.	ing No.	•	
<b>92</b>	75	92	2	Obv. symbol, crossbow
				bolt; rev. symbol, front
				view of crossbow.
107	115	107	1	
111	105	111	1	
113	110	113	1	
114	106	114	1	Obv. symbol, puteal
				(wellhead); rev. sym-
				bol, fountain.
118	126	118	1	
120	1		1	
121	3	_	1	
123	15	_	1	
125	22	_	1	
128	26	_	1	Obv. symbol, perhaps
			-	simpulum; rev. sym-
				bol, two crossed sacri-
				ficial knives.
136	51	_	1	ficial killves.
137	<b>52</b>	_	1	
144	66	_	1	
155	97	<b>–</b>		
160	112	_	1	
	112	_	1	
181	-	_	1	
182	_	-	1	
211	76	-	1	(Plate 18, 35)
				Obv. symbol, Doric col.
				capital; rev. symbol,
				Ionic col. capital.
_	_	_	1	Vatican 4610; Berlin.
				Obv. symbol, perhaps
				dagger; rev. symbol, per-
				haps club. (Plate 18, 36)
				haps class. (Flate 10, 30)



1

C. Die	Babelon	<b>BMCRR</b>	No	Description
Pairing	Die Pair-	Die Pair-	Coins	
No.	ing No.	ing No.		

New variety.

Obv. symbol, helmet with long visor; rev. symbol, petasus. (Plate 18, 37)

## 385/ M. VOLTEIUS

- 3. Rev. control-marks on l. in field, include:
  - 1. Wreath. New variety. (Plate 18, 38)
  - 2. Ladder.
- 4. Obv. control marks on l. behind head; rev. control-marks on r. above biga of lions, include:

Obv. Rev.

- 1. Round shield MH (Plate 18, 39)
- 2. Lyre key NA
- 3. Foot to r.  $\Xi Z$

#### 391/ C. EGNATIUS MAXSUMUS

- 2 Rev. control-marks at l. in field, include:
  - 1. XIIII
  - 2. XXIIII (Plate 18, 40)
  - 3. XXVI
- 3 Rev. control-marks at l. in field, include:
  - 1. E (Plate 18, 41)

#### 395/1 L. COSSUTIUS SABULA

Rev. control-marks at l. in field, include:

- 1. XII
- 2. XXIIII (Plate 18, 42)



## 399/1a Q. CREPEREIUS ROCUS

Obv. control-mark symbol at 1. behind head and control-mark (Latin letter) at r. before head; rev. similar Latin letter control mark above in field.

Obv. 1. Obv. r. Rev.
1. Fish D C (Plate 18, 43)

## 404/1 T. VETTIUS SABINUS (Plate 18, 44)

## 408/ C. CALPURNIUS PISO FRUGI

Listings according to C. A. Hersh, "A Study of the Coinage of the Moneyer C. Calpurnius Piso L. F. Frugi," NC 1976, pp. 7-63.

#### 1a Varieties include:

H. No.	No. Coins	
7	1	
18	2	
20	1	
23	1	
Post 27	1	New variety.
		Obv. 0-9; rev. R-1015. (Plate 18, 45)
38	1	
39	1	
42	1	
46	1	
50	1	
51	1	
53	1	
<b>56</b>	3	
66	1	
76	1	(Plate 19, 46)
84	1	
87	1	
90	2	
99	1	
	7 18 20 23 Post 27 38 39 42 46 50 51 53 56 66 76 84 87 90	7 1 18 2 20 1 23 1 Post 27 1  38 1 39 1 42 1 46 1 50 1 51 1 53 1 56 3 66 1 76 1 84 1 87 1 90 2



# 408/ C. CALPURNIUS PISO FRUGI (continued)

1a (continued)

	H. No.	No Coins
20.	107	1
21.	114	1
22.	115	1
<b>23</b> .	116	1
24.	119	1
<b>25.</b>	Unc.	1

Obv. 0-11; rev., unc.

## 1b Varieties include:

H. No.	No. Coins		
124	1		
127	3		
128	1		
129	1		
130	1		
131	1		
140	1		
141	1		
146	4		
147?	1		
154	2		
162	1		
163	1		
169	1		
171	1		
173	1		
Post 176	1	New variety.	
		<i>Obv.</i> $0-214$ ;	rev.
		R-2038.	
181	1		
184	1	(Plate 19, 47)	
186	1		
194	1		
198	1		
200?	1		
	124 127 128 129 130 131 140 141 146 147? 154 162 163 169 171 173 Post 176	124       1         127       3         128       1         129       1         130       1         131       1         140       1         141       1         146       4         147?       1         154       2         162       1         163       1         169       1         171       1         173       1         Post 176       1	124

408/1b C. CALPURNIUS PISO FRUGI (Continued)						
•	H. No.	No. Coins				
24.	209	1				
		-				

	22. 110.	210. 0000
24.	209	1
<b>25</b> .	212	1
26.	217	1
27.	221	1
28.	223	2
<b>29</b> .	231	1
30.	236	1
31.	237	1
32.	243	1
33.	248	1
34.	249	1
35.	252	1
36.	253	2
37.	256	2
38.	258	1
39.	<b>2</b> 59	1
40.	266	1
41.	269	1
42.	288	1
43.	<b>2</b> 89	1
44.	295	1
45.	298	1
46.	304	2
47.	315	2
48.	318	1
<b>49</b> .	319	1
<b>50.</b>	320	1
51.	323	1
<b>52</b> .	326	1
53.	327	2
54.	328	1
<b>55.</b>	329	2
<b>56.</b>	331	1
<b>57.</b>	336	3
58.	343	1

408/1b C	. CALPURNIUS PIS	O FRUGI (cont	inued)
•	H. No.	No. Coins	
59.	345	6	
60.	350	<b>2</b>	
61.	356	2	
<b>62.</b>	358	2	
63.	359	<b>2</b>	
64.	363	1	
<b>65</b> .	365	1	
66.	366	1	
67.	370	1	
68.	371	2	
69.	373	3	
70.	374	1	
71.	376	1	
72.	378	1	
<b>73.</b>	381	2	
74.	383	2	
<b>7</b> 5.	391	1	
<b>76.</b>	392	1	
77.	397	3	
78.	398	1	
79.	400	3	
80.	404	1	
81.	405	1	
<b>82.</b>	407	1	
83.	411	1	
84.	412	1	
85.	414	1	
86.	416	5	
87.	Post 430	1	New variety: new obv.
			(sequence mark) Z; rev.
	100		R-2016. (Plate 19, 48)
88.	432	10	
89.	438	4	(Plate 19, 49)
90.	442	1	
91.	445	1	

# 408/1b C. CALPURNIUS FRUGI (continued)

	H. No.	No.	Coins
92.	448	3	
93.	449	1	
94.	450	1	
95.	453	3	
96.	454	2	
97.	460	1	
98.	461	1	
99.	463	3	
100.	464	1	·
101.	Unc.	1	Obv. O-248; rev. unc.
102.	Unc.	1	Obv. O-309; rev. unc.
103.	Unc.	1	Obv. O-809; rev. R-2157(?) (Plate 19, 50)
104.	Unc.	1	Obv. O-813; rev. unc.
105.	Unattributable	9	

## 412/1 L. ROSCIUS FABATUS Varieties include:

	C. Die	Babelon	BMCRR	No.
	pairing	Die Pair-	Die Pair-	Coins
	No.	ing No.	ing No.	
1.	4	80	4	1
2.	8	93	8	1
3.	10	40	10	1
4.	11	67	11	1
<b>5.</b>	14	87	14	2
6.	16	95	16	1
7.	18	-	18	1
8.	19	-	19	1 (Plate 19, 51)
9.	29	119	<b>2</b> 9	1
10.	30	_	30	1
11.	31	83	31	2
12.	32	111	<b>32</b>	1
13.	35	-	35	1
14.	37	77	37	1

412/1	L.	ROSCIL	JS F/	<b>ABAT</b> l	JS (	(continued)
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412/1 L.	ROSCIUS FABAT C. Die	Babelon	ea) BMCRR	No.
	Pairing	Die Pair-	Die Pair-	Coins
	No.	ing No.	ing No.	2011.10
15.	38	_	38	1
16.	40	_	40	2
17.	42	125	42	2
18.	43	_	43	2
19.	44	42	44	1
<b>2</b> 0.	46	94	46	2
21.	49	138	49	1
<b>22</b> .	50	123	50	1
<b>23</b> .	53	73	53	2
24.	<b>54</b>	_	54	1
<b>25.</b>	55	-	55	1
<b>26.</b>	. 57	109	57	1
<b>27</b> .	65	17	65	1
<b>28.</b>	70	16	70	1
<b>29</b> .	71	100	71	1
<b>30.</b>	<b>72, 73</b>	76	<b>72</b>	1
31.	74	147	74	1
<b>32.</b>	77	112	77	3
33.	<b>78</b>	60	78	1
34.	80	<b>72</b>	80	1
<b>35.</b>	81	153?	cf. 81	1
<b>36.</b>	82	101	82	1
<b>37.</b>	83	-	83	1
38.	84	135	84	1
<b>39.</b>	85	143	85	1
40.	87	-	87	1
41.	90	_	90	4
<b>42.</b>	92?	_	92	1
43.	94	18	94	1
44.	97	81	97	1
<b>45.</b>	99	30	99	2
<b>46</b> .	100	_	100	1
47.	101	4	101	1

412/1 L. ROSCIUS FABATUS (continued)

112/1	E. NOOCIOO IMBA	(00	ica	
	C. Die	Babelon	BMCRR	No
	Pairing	Die Pair-	Die Pair-	Coins
	No.	ing No.	ing No.	
48.	103	-	103	1
<b>49</b> .	104	15	104	1
50.	105	-	105	1
51.	107	43	107	1
<b>52</b> .	110	-	73	1
<b>53.</b>	114	7	_	1
<b>54.</b>	119	19	_	2
<b>55.</b>	122	22	-	2
<b>56.</b>	124	24	-	1
<b>57.</b>	125	25	-	1
<b>58.</b>	131	36	_	1
<b>59.</b>	134	39	_	1
60.	136	44	_	1
61.	140	52	-	3
<b>62.</b>	142	58	_	1
63.	143	59	_	3 (Plate 19, 52)
64.	145	64	_	1
65.	146	65	_	1
66.	148	69	-	1
<b>67.</b>	150	74	-	1
68.	151	<b>7</b> 9	-	1
69.	153	85	_	2 (Plate 19, 53)
70.	154	86	-	1
71.	157	97	_	1
72.	162	104	_	2
73.	166	110	_	2
74.	173	121	_	1
<b>75.</b>	178, 179	130	_	3
<b>76.</b>	180	133	_	1
77.	181	.134	_	2
78.	183	137	_	2
<b>79.</b>	193	155	_	1

Paired Control-marks not Listed in Babelon or BMCRR

	C. Die	H. Ms.	No.	
	Pairing No.	No.	Coins	
80.	200	M	1	
81.	201	_	1	
<b>82.</b>	202	AZ	4	
83.	203	AS	1	
84.	212	P	1	
85.	220	AR	1	(Plate 19, 54)
86.	221	-	1	
87.	224	AP	1	
88.	228	C	1	
89.	229	D	2	
90.	238	BB	1	

#### Another Paired Control-Mark

	Babelon		
	Die	No.	
	Pairing No.	Coins	Remarks
91.	13	1	Crawford is in error here; he considered BMCRR 20 and Babelon 13 as one (C. 20): Babelon 13 obv. tall hat, perhaps a pileus; rev. whip or sickle. BMCRR 20 obv. conical skin cap with strings (galerus); rev. club. (Plate 19, 55)

Paired Control-marks not listed by Crawford, Babelon or *BMCRR*. References are to C. A. Hersh, Cataloguing of L. Roscius Fabatus Issue (unpubl. ms).

		No.	
H.	Ref.	Coins	Remarks
92. B		2	Obv. symbol, footed urn or pot; rev. symbol, perhaps stirrer. Other specimens Paris (D'Ailly 14658); Vatican 5192; Turin.



		No.	
	H. Ref.	Coins	Remarks
93.	G	1	Obv. symbol, club; rev. symbol, dagger. Other specimens Paris (D'Ailly 14732); Munich; Hersh Coll. (Plate 19, 56)
94.	X	1	Obv. unc. symbol; perhaps patera or other religious implement; rev. symbol, helmet or cap with spikes. Specimen in BM.
95	АН	1	Obv. unc. symbol; rev. hammer (?) as symbol. Specimens in Rome, Museo Nationale; Florence. (Plate 19, 57)
96.	AL	1	Obv. symbol, prow or rostral decoration; rev. symbol, acroterium or building decoration (animal head with ring in mouth). Other specimens, Naples 2536; Vatican 5195; Berlin. (Plate 19, 58)
97.	BA	1	Obv. symbol, pot with handle; rev. symbol, ladle. Other specimens Paris (D'Ailly 14771); Turin.
98.	BJ	2	Obv. unc. symbol, perhaps barnacle; rev. symbol, drenching horn (or other horn type). Another specimen in Hersh Coll.
99.	ВМ	1	New variety. <i>Obv.</i> and <i>rev.</i> symbols, unc. (Plate 19, 59)
100.	BN	2	Obv. symbol, helmet with crest; rev. symbol, different helmet. New variety. (Plate 10, 60)
	unc. symbols	4	riety. (Plate 19, 60)

# 413/1 L. CASSIUS LONGINUS

Obv. control-marks at l. below chin, include:

Latin letter No. Coins

	Latin letter	No.	Coins
1.	A	15	
2.	C	23	



3.	I	13
4.	L	15
<b>5.</b>	S	11
6.	S	17
	Unc.	14

#### 422 M. AEMILIVS SCAVRVS; P. PLAVTIVS HVPSAEVS

- 1a includes variant in obv. legend: M.SCAVRV for M.SCAVR. A different obv. die than Hersh 35.
- 1b includes the following variants:
  - (1) The words AED CVR are omitted on the obv. die. A different die than either *BMCRR* 2, p. 589, 10 or another specimen in the Hersh collection. There are at least three obv. dies with this variation.
  - (2) M.SCA R. for M.SCAVR on the obv. The hoard contained three specimens of this variant, all from different obv. dies. New variety.
  - (3) The scorpion is missing from the rev. die.

# THE SIGNIFICANCE OF THE MESAGNE HOARD EVIDENCE

Prior to the discovery of the Mesagne hoard, Crawford's arrangement indicated that there was an interval of almost two decades when the finds were not definitive in fixing the relative order of the moneyers' issues. This period extended from the burial dates of the large Ronco-freddo hoard and the four medium-sized finds, the latest of which was that from Cosa, in ca. 75/74 B.C., until the Compito (972 coins) and Casaleone (1,031 coins) hoards were deposited in ca. 55/54 B.C. As Crawford noted, "This is perhaps the most difficult period of the Republican coinage to arrange satisfactorily, at any rate if a precise arrangement is attempted; the hoard evidence helps only with part of it and the whole period is one of great stylistic diversity. I propose to use the hoard evidence to establish an outline arrangement and then with the help of stylistic and prosopographical arguments to attempt somewhat



greater precision." Thus, in the face of a lack of adequate data from hoards of sufficient size, Crawford had to fall back on style as a major criterion, a practice that he so decried when Grueber, de Salis, Sydenham and Alföldi did the same thing for similar reasons. As he had said, "An arrangement of the coinage based on stylistic criteria is at least partially subjective and therefore unreliable. Each new attempt produces a major alteration of previous versions, without argument beyond an invitation to 'see' the inherent correctness of the proposed system and without hope of convergence to ultimate agreement." 10

With the Mesagne evidence available, we are certainly on much firmer footing. I think that the presence of a sizeable number of rare issues and varieties in this hoard, as well as the large number of almost mint-quality pieces of great beauty and scarcity, would make it difficult to deny that we are examining either a complete hoard or at least a virtually complete one that in any case had not been picked through and the finer and later issues removed. This assumption is reinforced by the fact that, in the four years or so since its discovery, no other similar group of material has come onto the international coin markets.

Mesagne meets Crawford's standard for a major coin find admirably. "The composition of hoards of dated Imperial coins proves that any hoard may be expected to contain a representative selection of issues struck before its deposition. Any large hoard may be expected to contain all or almost all of the issues struck in the century or so preceding its deposition (a few very rare issues may be missing). The latest coins will be the least worn." Coins of all of the moneyers for almost a century, whose denarii were found in the five major hoards previously noted, of which the latest was the Cosa hoard, were also in the Mesagne hoard, with the exception of the normally missing very rare moneyers. In addition, the issues of seventeen new moneyers were present.

The fact that some rare issues of the late 70s are not present, those of L. Plaetorius (C. 396), P. Lentulus (C. 397) and Q. Pomponius Rufus (C. 398), does not really pose a problem as their positions in the chrono-



<sup>&</sup>lt;sup>8</sup> Crawford, p. 83.

<sup>&</sup>lt;sup>9</sup> RRCH, p. 2.

<sup>10</sup> RRCH, p. 3.

<sup>11</sup> RRCH, p. 2.

logical arrangement are basically fixed since their issues were among the denarii found in the Pontecorvo and Cosa hoards or are linked to them, as in the case of the coins of Pomponius.<sup>12</sup> As we have seen, the rare and uncommon issues tend to disappear from hoards after a decade or so in almost every case.

Again, there are coins struck by moneyers, in Crawford's arrangement dated to late 60s and early 50s, which should be present among the Mesagne coins, but which are missing. These absences can be reconciled without too great a problem. The denarii of M. Pupius Piso Frugi (C. 418) are rare and in any case closely linked to the coins of M. Aemilius Lepidus (C. 419) through the joint usage of certain priestly symbols which are not found elsewhere on Republican coins. The issues of P. Plautius (H)Ypsaeus individually (C. 420) and M. Nonius Sufenas (C. 421) can be placed just after the joint issue of M. Aemilius Scaurus and Hypsaeus (C. 422) as curule aediles, rather than just before it, as both moneyers are striking Ex S.C. instead of as regular moneyers.

The really difficult problem to reconcile arises from the fact that two common issues are completely missing, the Ex S.C. coins of M. Plaetorius Cestianus (C. 405), supposedly struck in 69 B.C., and those of Q. Pomponius Musa (C. 410), said to have been minted in 66 B.C., as are the scarcer denarii of L. Manlius Torquatus (C. 411), which had been dated to 65 B.C. The coins of Manlius, however, do not occur in any of the hoards of the 60s or the 50s shown in RRCH and in fact do not turn up until the Cadriano hoard of ca. 49 B.C. As far as the missing issues of Cestianus and Musa are concerned, however, we must rethink the problem and do as Crawford says, utilizing hoard evidence rather than relying on stylistic considerations.

Our revision of the Crawford plan is not at all revolutionary, but it does solve most of the problems inherent in that schema. One difficulty certainly raised by our new arrangement is the squeezing of the issues of twenty-three other moneyers into the eight year period between 58 and 51 B.C. This would seem to be too many for such a short time, even though nine of these are extraordinary  $Ex\ S.C.$  issues. This arrangement, however, definitely appears to be the testimony of the hoard evidence. Three of these issues have dates that are firmly fixed and



<sup>12</sup> Crawford, p. 82.

which fall within these years: the denarii of A. Plautius (C. 431) and Cn. Plancius (C. 432) were struck while they were curule aediles in 55 B.C. and that of Valerius Messalla (C. 435) was minted when his father M. Valerius Messalla Rufus was consul in 53 B.C.

This new arrangement will not change the deposition date of the hoard, which is still firmly anchored by the joint issue of Scaurus and Hypsaeus (C. 422), struck when they were curule aediles in 58 B.C. Both are known personages; Scaurus became praetor in 56 B.C., Hypsaeus in 55 B.C.

#### SPECIFIC COMMENTS

C. 387, 388. The issues of Rutilius and Satrienus were both in the Albi di Massa and Capreni Hoards, while those of Volteius (C. 385) and Cassius (C. 386) were not present.

C. 391, 392. The issues of Egnatius and Farsuleius were placed before 385, 386, 389 and 390 because they were in the San Mango and Capreni hoards respectively, while the other four issues were not.

C. 409. Crawford shrewdly followed Grueber's suggestion<sup>13</sup> and separated the two groups of issues of M. Plaetorius Cestianus. He placed the Ex S.C. issues in ca. 69 B.C. (C. 405) and his curule aedile coins (C. 409) in ca. 67 B.C. It appears certain that Cestianus minted in two different years. The hoards, however, indicate a different order of issue. The curule aedile issues occur first, having been struck in ca. 67 B.C., as Crawford postulated, and were found in the Kavalla, Mesagne and San Gregorio hoards and regularly thereafter. See C. 405 below for the Ex S.C. issues of Cestianus, which are later in date.

C. 408, 413. The coins of C. Calpurnius Piso Frugi and L. Cassius Longinus were not in the Licuriciu hoard, while those of Furius Brocchus (C. 414) and Paullus Aemilius Lepidus (C. 415) were, and should follow



<sup>13</sup> BMCRR, pp. 434-35n.

otanicuta	Guljancy	Licuriciu	Mesagne	San Gregorio	Kavalla	Sustinenza	Frauendorf	Ancona	Compito	Salsasul de Sus	Alesia	Grazzanise	Casaleone	Broni
	1 2 1	3	82 16 59 20 29 42 16 38 139 63	9 2 9 2 5 6 1 5 3 5	2 2 1 1 1 2	2 1 2 1	1 8 3 3 3 1	1 1	9 3 1 1 3 6 21 5	1 1 1 3	1 1 1	4 1 1 2 2 1	8 2 4 4 1 3 3 2 10 5	
	1 1	3	1 112 42 10 28 154 198 83	1 1 1 7 2 10	1 1 1 1 1	1 1 1 1 2 1	2 1 1	1 2 1 2 1	7 1 7 4 12 5 8	1	1 1 1 3 2	1 1 1 1 3 2	1 1 6 7 8 5 11	1 1
	1	1 1	138 108 99 279 268 14	8 7 4 14 8 3 1	3 1 6	3 1 1 1	1 4 1 3	1 1 1 1 1	5 6 4 14 19]	1	2 6 2 2	1 3 2 4 6 1	7 8 9 15 18 2	1 1 1
			7 196	6	2	1 4	1 1 1 2 1	1	9 11 28 1 12 1 4	1	5 1 1	1 1 9 1 11 2 2	4 4 24 4 20 5 1	1 1 3
								1	1 1	1	1 1 2	2 4 2	3 1 5 6 10 4	1 1 1 1 2
4:	38	63	5,940	563	83	395	563	47	972	106	134	276	1,031	100

TIEVISZ-SZAIIUS	Guljancy	Licuriciu	Stancuta	Kavalla	Mesagne	San Gregorio	Sustinenza	Frauendorf	Ancona	Compito	Salasul de Sus	Alesia	Grazzanise	Casaleone	Broni
1 1	1 1 1	1		2 1 1 2 1 2	59 20 16 38 139 82 16 29 42 63 12	9 2 1 5 3 9 2 5 6 5	1 1 2 2	3 3 1 1	1 1 3	3 1 6 21 9 1 3 5	3 1 1	1 1 4	1 2 2 4 1 2 1	4 4 3 2 10 8 2 1 3 5	
1	1 1	3 1 1 1	1 1	1 1 1 6 1 3 2	1 1 28 42 83 10 112 154 99 279 268 14 198 108 138 196 7	1 1 1 10 1 7 4 14 8 3 2 7 8 6 1 1	1 1 1 1 1 1 1 2 3 4	1 2 1 3 4	2 1 1 1 1 1 1	4 1 8 7 12 4 14 19 5 6 5 28	1 1 1	1 1 3 6 2 2 2 2 5	1 2 1 1 4 6 1 3 2 3 9	7 1 11 1 8 9 15 18 2 5 8 7 24	1 1 1 1 1 3
						•	1 1 1 1	1 1 1 2 1	1 1 1	7 11 12 9 1 4 1 1 3 1	1	1 1 1 1 1 2	1 1 11 1 2 1 2 2 2 2 2 1	6 4 20 4 5 1 4 1 14 3 5 6 10 4 4	1 1 1 1 1 1 1 1 1
4:	38 6	3 3	34 8	33 5	,940	563 3	95 5	663	47	972 1	06	134	276	1,031	100



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Brocchus and Lepidus and their related issues (C. 416 and 417). In the Mesagne hoard the coins of Piso and Longinus were in almost mint condition, where not marred by corrosion during burial. Piso, who was Cicero's son-in-law, must have been a moneyer in ca. 60 B.C., as he died in 57 B.C., after his term as quaestor in 58 B.C. had been completed.

C. 412. The denarii of Roscius are uniformly in mint condition at Mesagne, except partially corroded pieces injured while in the ground. These coins represent the last use of serrations as a regular mint practice during the Republic. This issue utilized the same system of sequence marks as the denarii of L. Papius (C. 384) some years earlier, paired symbols—one on each of the obverse and reverse dies. If similar pairs of symbols are used on both issues, they are usually found on the opposite die, so the Mint authorities were well aware of the control marks on the Papia issue. Other similarities are found between the silver of Papius and Roscius as well, both issues are serrate and the types on both coins indicate that the families of the moneyers originated in Lanuvium.

**C. 419, 418.** The issues of Lepidus (C. 419) are apparently the latest in the Mesagne hoard, while both those of Lepidus and Pupius Piso (C. 418) occur in the San Gregorio find, a smaller hoard which is almost identical in the composition of its latest issues to Mesagne.

C. 405. The Ex S.C. issues of M. Plaetorius Cestianus do not actually occur in hoards until long after his curule aedile issues (C. 409) have made their appearance. As noted above, the latter coins are found in quantity in the Mesagne and San Gregorio hoards, but the former pieces do not occur in hoards until Sustinenza and Frauendorf and regularly after that. The Ex S.C. issues were struck in ca. 57 B.C., rather than in 69 B.C. as Crawford postulated, well after the curule aedile issues of 67 B.C. Cestianus, who had been a praetor in ca. 64 B.C., struck his Ex S.C. denarii under Senatorial authority, acting as a pro-praetor perhaps, rather than as a regular moneyer.



C. 421, 425. The issues of Nonius Sufenas and Marcius Philippus are found at Sustinenza and Frauendorf, while those of P. (H)Ypsaeus individually (C. 420) do not appear until Frauendorf.

**C. 410.** The many types struck by Musa do not show up in the hoards until Ancona. They are not present, however, in the Compito hoard of 972 pieces. They are certainly from about a decade later than the date proposed by Crawford.

C. 435. The rare coin of Valerius Messalla does not occur until the Arbanats hoard buried ca. 40 B.C., but its date is fixed at 53 B.C. by its reverse legend.

Using any single hoard as the basis for a major revision of so well-conceived and thought-out a plan as that of Crawford is only done after much deliberation, but the Mesagne hoard is so large and apparently complete that it must be essayed if hoard evidence is to be utilized as the primary source of information in arriving at an arrangement of the issues of the 60s and 50s. By referring to our arrangement, it is clear that Mesagne does not stand alone as a guide, however. As noted earlier, its evidence is seconded by the smaller San Gregorio di Sassola hoard of 563 coins found in Italy in 1903, which clearly verified the data indicated by the coins in the Mesagne hoard.



## ANSMN 29 (1984)

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## A SEAL OF NIKEPHOROS VOTANEIATES

MARK C. BARTUSIS

In the Byzantine lead seal collection of the American Numismatic Society exists an unpublished specimen of prosopographical interest.<sup>1</sup> The seal, ANS 1944.78.47 is a metallic copy of an authentic original which was well worn with its edge apparently manually shaped and notched. The diameter of the seal varies from 32 mm to 36 mm and its field is approximately 29 mm.<sup>2</sup>





- $^{f 1}$  I had the opportunity to study this seal and others during the 1980 ANS Seminar in Numismatics.
- <sup>2</sup> Dr. V. Šandrovskaja has kindly informed me, per litteram, that the Hermitage possesses two additional identical metallic copies of this seal.



Obv. Saint Demetrios, nimbate, beardless, standing facing, wearing a short tunic and a chlamys falling behind his back in folds. In his right hand is a spear which rests on the ground; in the left he holds a shield, tilted forming a triangle. The border and the saint's nimbus are made of dots. All epigraphy in the right field is effaced, but on the left we read, indistinctly, in a column:  $\bigcirc - \triangle - H - M$ .  $\bigcirc \triangle \cap \mu$ 

Rev. A legend in six lines with letters spaced unevenly. Border of dots. The legend reads:

+ Ker,θ, ΝΙΚΗΦΟΡω [ ]ΝΘΥΠ,Τ,ΠΡΙ [ ]ECTITOR, TANIA ΤΗ

+ K(ύρι)ε, β(οή)θ(ει) Nικηφόρω [ά]νθυπ(ά)τ(ω) π(ατ)ρι(κίω) [β]έστ<η> τ< $\~φ>$  B(ο)τανιάτη.

Prima facie this seal belonged to a certain Nikephoros Votaneiates who held the ranks of patrikios, anthypatos and vestes, in the Byzantine hierarchy of court titles. In the lists of precedence which we possess from the ninth and tenth centuries, the rank of patrikios occupies the seventh position in the hierarchy from the emperor, anthypatos holds the sixth position in all the lists except that of the tenth-century Taktikon Scorialensis where it is omitted entirely, and the title vestes, newly created in the tenth century, appears only in the Scorialensis list where it assumes the sixth position in the hierarchy of ranks.<sup>3</sup> Therefore, at the time the seal was struck Nikephoros held the rank of vestes, having risen through the ranks of patrikios and anthypatos, and here on this seal he displays as much of his curriculum vitae as would fit on the reverse of the seal, not an uncommon practice among middle Byzantine office holders.

<sup>3</sup> N. Oikonomides, Les listes de préséance byzantines de IX<sup>e</sup> et X<sup>e</sup> siècles (Paris, 1972), pp. 292, 294-95.



Since the title vestes was created only in the tenth century,<sup>4</sup> and since all these titles tend to disappear during the early twelfth century,<sup>5</sup> the seal had to have been struck sometime between the tenth and early twelfth centuries. Given these broad chronological bounds, there are only two candidates for the owner of this seal: the emperor Nikephoros III Votaneiates (1078–81) and his grandfather and namesake. Despite the sigillographer's natural inclination to assign an unknown seal to an emperor if at all possible, this is not so easy to do in this case. For one thing, neither the documentary nor the literary sources ever attribute any of these three titles, patrikios, anthypatos, vestes, to the future emperor. And second, his grandfather, Nikephoros Votaneiates, doux of the theme of Thessaloniki, is cited by Attaleiates as possessing the rank of vestes.<sup>6</sup>

In regard to the first objection, while it is true that the literary and documentary sources do not attribute any of these titles to Nikephoros III before his accession, this of course does not mean that he did not at some time early in his career possess them nonetheless. For example, the literary sources, in which he either appears with the title magistros or kouropalates, never give him the title proedros. Yet we possess three documents from 1061 and 1062 which he himself signed as proedros and doux of Thessaloniki. Hence, the written sources do not compel us to

- <sup>4</sup> Precisely between 934 (the earliest date for the last precedence list, that of the *Taktikon Beneševič*, which does not include it) and 979 (the latest date for the compilation of the first list which does mention it, that of the *Taktikon Scorialensis*). See Oikonomides (above, n. 3), pp. 240-43, and 258-61.
  - <sup>5</sup> Oikonomides (above, n. 3), pp. 294-95.
- 6 G. Zacos and A. Veglery, Byzantine Lead Seals, 1 (Basel, 1972), p. 1462, cited hereafter as Z-V. Michael Attaleiates, Historia, ed. I. Bekker, CSIIB (Bonn, 1853), p. 230. Ioannis Scylitzae Synopsis historiarum, ed. I. Thurn, Corpus Fontium Historiae Byzantinae (Berlin-New York, 1973), pp. 350 and 352. G. Begleris, 'Ο αὐτοκράτως τοῦ Βυζαντίου Νικηφόρος ὁ Βοτανειάτης (Athens, 1916), p. 8. Skylitzes refers to the grandfather as Theophylaktos Votaneiates. On this, see G. Schlumberger, L'Epopée byzantine à la fin du dixième siècle, 2 (Paris, 1900), pp. 346-47, and Begleris, pp. 10-12.
- <sup>7</sup> A praktikon for Iveron (December 1061): St. Kyriakidis, Βυζαντιναὶ Μελέται, 4 (Thessaloniki, 1937), p. 53, no. 5, and F. Dolger, Aus den Schatzkammern des Heiligen Berges. 115 Urkunden und 50 Urkundensiegel aus 10 Jahrhunderten (Munich, 1948), p. 160, n. 32, cited hereafter as Dölger. An hypomnema for Iveron (April



dismiss the possibility that the future emperor had been patrikios, anthypatos and vestes.

Second, it is possible to conclude that both Votaneiatai, grandfather and grandson, were vestai. The evidence for this is derived from Z-V no. 2686 belonging to a doux Nikephoros Votaneiates, vestes, vestarches and magistros. The editors of this catalogue also experienced difficulty in attributing this seal to one or the other Votaneiates. They concluded that it is most likely a seal of the future emperor because Nikephoros III is commonly referred to as magistros in the literary sources, while these same sources attribute no greater rank than vestes to his grandfather. This is well reasoned and supports the attribution of Z-V no. 2686 to Nikephoros the grandson. But I think one may proceed further, the key being the rank vestarches.

The rank of vestarches, probably created by Nikephoros II Phokas, first appears in the list of precedence of the Taktikon Scorialensis, the composition of which is dated between 971 and 975. In this list the rank is reserved exclusively for eunuchs. It is not until the 1040s that non-eunuchs are seen bearing the rank of vestarches. Now, in order for Z-V no. 2686 to have belonged to grandfather Votaneiates, he would have had to have received the vestarches rank at least a few years prior to his death during the Bulgarian campaign of 1014. Since he was certainly no eunuch, he would have been the first attested non-eunuch imperial servant to bear this rank, a full generation before any other non-eunuch appears with the rank. This is very unlikely. Therefore, it can be concluded with relative certainty that Z-V no. 2686 ought to be attributed to the future emperor. Thus, the grandson Votaneiates



<sup>1062):</sup> Dölger, no. 57, 32. Another document for Iveron (August 1062): Dölger, no. 120, 5/6 (with seal), and Kyriakidis, p. 53, no. 6. Z-V, p. 1463, inadvertently conflates the latter two documents.

<sup>&</sup>lt;sup>8</sup> Oikonomides (above, n. 3), pp. 263, 15; 292; 299-300, and "L'Évolution de l'organisation administrative de l'Empire byzantin au xi<sup>e</sup> s.," *Travaux et Memoires* 6 (1976), p. 126. It is necessary to revise the opinions of E. Stein, "Untersuchungen zur spätbyzantinischen Verfassungs- und Wirtschaftsgeschichte," *Mitteilungen zur Osmanischen Geschichte* 2 (1923-26), p. 29, n. 3, and R. Guilland, *Recherches sur les institutions byzantines*, 1 (Berlin, 1967), pp. 200, 266.

<sup>&</sup>lt;sup>9</sup> Z-V, p. 1462. Schlumberger (above, n. 6), pp. 342-43, 346-47. Skylitzes (above, n. 6), p. 352.

bore, in addition to both the titles of vestarches and magistros, that of vestes.

In regard to the ANS seal, we are left in a position little changed except that now nothing in the titulature precludes identifying the owner of the seal as either of the Nikephoroi Votaneiatai. Nor do other constituent factors such as iconography, epigraphy or orthography provide much help. The standing Demetrios motif was the future emperor's favorite obverse type, but since his grandfather's saint is unknown, it might well have also been Demetrios. Stylistically, the execution of St. Demetrios is similar to other seals of the future emperor (particularly Z-V no. 2687), with one notable difference: the spear column intersects the saint's right arm at two points, forearm and hand, whereas in Votaneiates's other seals the spear meets Demetrios only at the hand.10 The standing Demetrios type itself seems to make its appearance first in the late tenth century, which accommodates either attribution.11 Furthermore, grandfather and grandson flourished in sufficiently close proximity that a dating based on epigraphy is inconclusive. Moreover, while all of grandson Nikephoros's seals issued up to 1062 spell his family name without the epsilon<sup>12</sup> (the later seals all including this letter), this may well have been the way his grandfather spelled his name as well. The size of the piece tends to favor a mid-eleventh century date, but this is no absolute guide. Otherwise, since the grandson became emperor, it is likely that his seals would have stood a better chance of being preserved by contemporaries, although they too might have believed every document and seal with the name Nikephoros Votaneiates was issued by the emperor. I conclude that although an attribution of this seal to the future emperor Nikephoros III is probable chiefly because more than a dozen of his seals exist, while none has ever been assigned to his grandfather—grounds for certainty have not been established.



<sup>10</sup> Compare Z-V, nos. 2687-2690bis, and Begleris (above, n. 6), plate. On the other hand, a striking stylistic parallel (involving St. Theodore) is found in a seal of Theocharistos Antiochites (ANS-ETN and G. Schlumberger in REG 13 [1900], p. 486) which dates to the third quarter of the eleventh century. The style of epigraphy on the reverse is, however, quite dissimilar to that of the present seal.

<sup>&</sup>lt;sup>11</sup> Compare G. Schlumberger, Sigillographie de l'empire byzantin (Paris, 1884), p. 296: seal of Leon Lalakon, doux of the Armeniakon, dated to 986.

<sup>12</sup> I.e. Z-V, nos. 2686, 2687, and Dölger no. 120, 5/6.

#### DATE

Since there are two possible attributions for this seal, there are two possible dates for its issue. Grandfather Votaneiates is never given any rank higher than that of *vestes*, and so he most likely held this rank at his death in 1015. And since it is improbable that anyone would hold such a rank for a long period of time, the seal, if it belonged to the grandfather, can be assigned to the first fifteen years or so of the eleventh century.

If, on the other hand, the seal belonged to Nikephoros III prior to his accession, it would have to be dated to a time before 1053 when he saved the strategos and future emperor Romanos Diogenes from drowning in the Istros. At that moment Nikephoros first appears in the sources and he bears the rank magistros. 18 It is not clear whether he was magistros before or after his act of heroism, but this was certainly a deed that would have been rewarded with a promotion. And since he bore the next higher dignity, that of proedros, from at least 1061 to at least 1068 (during which time he held three important governorships), I think it probable that he became magistros in 1053, as a result of saving Romanos's life. Otherwise he would have been awarded the proedros rank in 1053 and kept it for at least fifteen years which is unlikely. This might also explain the peculiar habit of the historians who continue to call the future emperor magistros long after he had been promoted through various higher ranks;14 saving the life of a future emperor is an act not soon forgotten. In fact only two of his deeds prior to the 1060s are recorded: the rescue of Romanos and his support of Isaakios Komnenos's rise to the throne. He received the magistrate in 1053, and because of his notable feat, he was long known as "Votaneiates the magistros." It is also probable that Votaneiates was rewarded for his support of Isaakios in 1057. Thus I think he became magistros in 1053 and proedros soon after Isaakios's accession in 1057.

The seal was issued prior to 1053, but since it lacks the title vestarches which Nikephoros must have borne prior to that of magistros, a date



<sup>13</sup> Attaleiates (above, n. 6), p. 97, 23. Z-V, p. 1464. Begleris (above, n. 6), pp. 12-13.

<sup>&</sup>lt;sup>14</sup> See Z-V, p. 1464.

prior to around 1050 is a bit more precise. A terminus post quem for our seal is more difficult to determine since it is not known how old Nikephoros III was when he died in 1081, soon after his abdication. Since the sources do not make any mention of his being particularly old at the time of his rebellion in 1077, he could not have been born before ca. 1010. This means that he could not possibly have been vestes before 1030, assuming he was patrikios and anthypatos in his teens. Therefore, if the seal belonged to Nikephoros III, it was struck sometime between 1030 and 1050, most probably in the 1040s. And so regardless of the attribution, the seal is securely dated to the first half of the eleventh century.

A proper biographical study of Nikephoros III Votaneiates still needs to be written.<sup>15</sup> Certainly the man's life is not without interest. During the course of his long career, beside his short term as emperor, Nikephoros held at least seven provincial governorships encompassing nearly every region of the empire. His verifiable cursus honorum was exemplary, embracing the seven highest ranks in the contemporary hierarchy of honors, from vestes to sevastos, before assuming the imperial honor itself. If the present seal can be attributed to him, the early ranks of patrikios and anthypatos may also be added.

15 This call was made years ago by G. Buckler, "A Sixth Century Botaniates," Byzantion 6 (1931), pp. 405-10. The most thorough treatment of Nikephoros III is found in the catalogue of Z-V, pp. 1462-68, which not only publishes or cites Nikephoros's seals, but is richly documented. A somewhat dated, but still useful work, is the brief study of Begleris (above, n. 6). To the corpus of Nikephoros's seals one may add a specimen published by V. Šandrovskaja, Vizantijskie pečati v sobranii Ermitaža (Leningrad, 1975), no. 2 (sevastos and doux of Hellas).



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## LONGUET'S SALONICA HOARD REEXAMINED

(Plates 20-26)

SIMON BENDALL

It is not uncommon for coins to disappear from sight for years at a time but to recover a hoard, virtually intact, of no less than 73 coins lost for a period of 44 years is indeed extraordinary. This hoard, the so-called "Salonica" hoard, consists of mid-fourteenth century Byzantine copper coins belonging to the mint of Thessalonica. Many of the types were completely unknown prior to the discovery of the hoard, and now, nearly 50 years later, no less than four types are still known only from the coins in this hoard. It is the association of so many rare coins that makes this hoard so important, for there exists only one other hoard of Thessalonican coins of this same period and that contains only eight coins.<sup>1</sup>

In recent years many advances have been made in the study of Palaeologan coinage, and, in the light of this new knowledge, the author was extremely fortunate to be allowed by the owner to examine the hoard on its fortuitous reappearance after so many years and to be able to reassess Henry Longuet's original findings.<sup>2</sup>

The history of the Salonica hoard is as follows. Two or three years before the Second World War a scholarly friend of Dr. Longuet's was



<sup>&</sup>lt;sup>1</sup> D. Nicol and S. Bendall, "Anna of Savoy in Thessalonica: the numismatic evidence," RN 1977, pp. 87-102.

 $<sup>^{\</sup>mathbf{2}}$  H. Longuet, "Un Trouvaille de Monnaies des Palaeologues," RBN 1960, pp. 243–66.

browsing in an antique shop in Salonica when a peasant entered and offered the hoard for sale. The friend acquired it and took the hoard to Dr. Longuet. The doctor proceeded to make notes and photograph some of the coins. Then came the war and during these years the hoard, together with the notes and photographs, disappeared. Several years later, possibly in the mid-to late-1950s, Dr. Longuet found his notes and photographs and was, therefore, able to publish the hoard in 1960.

Despite the fact that he did not have the coins to hand and was, consequently, unable to decipher many of the overstrikes, his deductions and conclusions were extremely accurate, and his article marked a great advance in the study of late Palaeologan coins. He concluded that the coins represented the currency struck in Thessalonica between ca. A.D. 1330–60. He attributed nine types (L. 1–9) to Andronicus III, one type (L. 10) to Anne of Savoy and John VI, two types (L. 11–12) to John V and John VI, and seven types (L. 13–19) to John V's sole reign. Considering the state of numismatic knowledge at the time, his reasons for this arrangement were cogent.

In the mid-1960s a small hoard of only eight coins was found near Pella containing seven coins depicting an empress and emperor, which represent issues struck by Anna of Savoy as empress at Thessalonica from A.D. 1355. The style of these coins is quite unlike the earlier issues of the Salonica hoard. The eighth coin in the Pella hoard, in very worn condition, was similar to several of those in the Salonica hoard showing the emperor on horseback. The differences in style and wear clearly indicate that there was a gap in production of coinage at Thessalonica, which can only have been due to the Zealots' revolt, A.D. 1342–50. It seems most likely, therefore, that the coins in the Salonica hoard were struck before 1342.

Examination of the actual coins shows that their arrangement, however, is certainly not as straightforward as that proposed by the author, working only from Longuet's published pictures, in *The Later Palaeologan Coinage*.<sup>3</sup>

<sup>3</sup> S. Bendall and P. J. Donald. Later Palaeologan Coinage (London, 1979); cited hereafter as LPC.



### **CATALOGUE**

At least one and possibly two coins were missing from the hoard on its reappearance, and substitutions had been made. These additions are listed separately at the end of the catalogue. Correlation is further complicated by the fact that not only did Longuet fail to photograph every coin, but he also mistook enlargements of coins already listed as new coins, so that there were the following duplications:

Longuet =	Rev.	of	Longuet
29	18b		
30	15e		
33	15b		,
35	14g		
36	5		
37	4b		

Longuet's errors mean that a number of coins in the hoard were completely omitted from his original publication.

The coins in the hoard had a green patination which was of such a depth as to obscure most of the details of the undertypes. As a result, all those coins which exhibited any trace of identifiable undertype were cleaned, and this accounts for the variations in tone in the plates.

Following both the original publication of the hoard and the arrangement in *LPC*, the side depicting the emperor is called the obverse.

The arrangement follows a tentative chronological sequence based upon overstrikes and scyphate issues preceding flat coins.

- Obv. Full length figure of emperor, wearing stemma, divitision, collar piece and loros; in each hand, cross in circle on long shaft.
  - Rev. Large patriarchal cross; star in lower r. and l. field.

Longuet 9; LPC 220, no. 26; 0.79 g (Longuet—). This type seems to be the earliest in the hoard. When issued it bore an obverse legend, while many of the later coins are an epigraphic; it is very worn and seems to have been clipped down.

<sup>4</sup> In order to simplify the description of the coins, obverse legends have been omitted. Full descriptions of the types will be found in *LPC*.



- 2. Obv. Full length figure of senior emperor r., bearded, wearing stemma, divitision and loros; in l. hand, scepter cruciger. Full length figure of junior emperor l., beardless, similarly dressed; in r. hand, scepter cruciger. Senior emperor crowns junior emperor.
  - Rev. (Large six-pointed star.) Brockage.

Longuet 20; LPC 230, no. 5; 1.03 g (Longuet 1.05 g). The combinations of bearded and beardless emperors can only allow an attribution to Andronicus II and Michael IX, although such an early coin might be expected to be somewhat larger.

- 3. Obv. Full length figure of emperor, wearing stemma, divitision, collar piece and loros, crouched "in supplication" to r. before standing figure of Christ, wearing tunic and colobion, standing l. blessing emperor.
  - Rev. Half length figure of Archangel, beardless and nimbate, wearing tunic, loros and sagion, holding in r. hand, sword over r. shoulder, in l., shield.

Longuet 1; LPC 204, no. 1; 1.43 g (Longuet 1.50 g). A close examination of this coin and other coins seen since the publication of LPC leads to the conclusion that the two coins published as LPC 234, no. 1 and 260, no. 3 are, in fact, the same type and should be attributed to John V. This coin, therefore, could belong to the reign of either Andronicus II or Andronicus III. Size, style, and condition indicate the latter emperor, while the presence of a legend on the obverse points to the early part of his reign.

- 4. Obv. Two figures standing holding patriarchal cross; r. figure, nimbate.
  - Rev. Brockage.

Longuet 22; 1.03 g (Longuet —).

- 5. Obv. Full length figure of emperor wearing stemma, divitision and loros, in r. hand, large labarum, in l., scepter cruciger.
  - Rev. Quite illegible.

Longuet 5; LPC 240, no. 10; 1.70 g (Longuet 1.70 g).



- 6. Obv. Full length figure of emperor wearing stemma, divitision and loros, winged to r.; in r. hand, cross in circle resting on large **3**, in l., scepter cruciger.
  - Rev. Bust of winged St. Michael.

    Longuet 6; LPC 238, no. 9; 1.04 g (Longuet 1.10 g).
- 7. Obv. Full length figure of emperor wearing stemma, divitision, A-B collar piece and loros; in r. hand, scepter cruciger; l. hand on chest; **8B** to l. and r.
  - Rev. Indistinct; large 8 1.

A-Longuet 3a; B-Longuet 3b; LPC 240, no. 11; A-1.94 g (Longuet 1.95 g); B-1.69 g (Longuet 1.60 g). No. 7A is overstruck on a specimen of LPC 228, no. 1, which is an issue of Andronicus II and Michael IX.

- 8. Obv. Full length figure of emperor, wearing stemma, divitision and loros; in both hands, model of city; above r., Manus Dei; star in lower l. field; monogram (?) in lower r. field.
  - Rev. Uncertain.

    Longuet 23; LPC Additions 14; 1.03 g (broken); (Longuet—).
- 9. Obv. Full length figure of emperor wearing stemma, divitision and A-C loros; in r. hand, scepter cruciger, in l., globus cruciger; above r., Manus Dei; two stars in l. field.
  - Rev. Full length figure of St. Demetrius, beardless and nimbate, wearing tunic, breastplate and sagion; in r. hand, spear, in l., shield.

A-Longuet 4a; B-Longuet 4b; C-Longuet—; *LPC* 212, no. 14. A-— (Longuet 1.60 g); B-1.44 g (Longuet 1.50 g); C-0.96 g (Longuet—). 9A is missing from the hoard. 9B is overstruck on a specimen of *LPC* 204, no. 2. 9C was one of the coins omitted by Longuet in his publication of the hoard.

- 10. Obv. Full length figure of emperor, wearing stemma, divitision and loros; in r. hand, akakia (?); possibly all under a canopy.
  - Rev. Palaeologan monogram.

Longuet 17; LPC 240, no. 12; 1.07 g (broken); (Longuet 1.00 g).. Longuet, followed by the author in LPC, described this type as the emperor apparently being blessed by a small figure. This is, however, probably a figment of doublestriking, and the emperor is, in fact, standing under a canopy, as on LPC 220, no. 24.



- 11. Obv. Emperor, wearing stemma, divitision and loros, riding on A-J horseback to r. holding scepter cruciger in r. hand; B in l. field, star in right field.
  - Rev. Palaeologan monogram; two stars in field.

```
LPC 242, no. 13 1.63 g (Longuet 1.60 g)
A-Longuet 7a
B-Longuet 7b
                                  1.62 g (Longuet—)
C-Longuet 7c
                                  1.86 g (Longuet 1.90 g)
D-Longuet 7d
                                  1.47 g (Longuet 1.45 g)
E-Longuet 7e
                                  1.42 g (Longuet 1.20 g)
F-Longuet 7f
                                  1.20 g (Longuet 1.20 g)
G-Longuet 7g
                                  1.22 g (Longuet 1.15 g)
H-Longuet 7h
                                  0.97 g (Longuet 1.00 g)
I-Longuet 7i
                                  0.95 g (Longuet 1.00 g)
                                  0.86 g (Longuet 0.90 g)
J-Longuet 7j
```

- 12. Obv. As no. 11.
  - Rev. Bust of St. Demetrius, beardless and nimbate, wearing tunic, breastplate and sagion; in r. hand, sword over r. shoulder, in l., shield.

Longuet 8; LPC 242, no. 14; 1.04 g (Longuet—).

- 13. Obv. Full length figure of emperor wearing stemma, divitision A-F and loros; in r. hand, akakia, in l., scepter (?). Large \(\mathbb{G}\) in r. field; small figure in upper r. field, blessing emperor.
  - Rev. Full length facing figure of the Virgin, wearing tunic and maphorion, orans, two stars either side.

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A-Longuet 13a LPC 236, no. 4 0.95 g (Longuet 1.00 g)

B-Longuet 13b 1.80 g (Longuet 1.85 g)

C-Longuet 13c 1.37 g (Longuet 1.40 g)

D-Longuet 13d 1.04 g (Longuet 1.10 g)

E-Longuet 13e 1.18 g, broken (Longuet—)

F-Longuet 13f 1.50 g (Longuet 1.60 g)

13E is overstruck on a specimen of LPC Additions no. 7.
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- 14. Obv. Full length figures of emperor, l. and military saint, Theodore, r. Emperor wears stemma, divitision and loros; in r. hand, scepter. Saint wears tunic, breastplate and sagion; in l. hand, sword over l. shoulder; places r. hand on emperor's head.
  - Rev. Large six-pointed star.

Longuet 21; LPC 208, no. 6; 1.18 g (Longuet 1.20 g).



15. Obv. Full length figure of emperor, wearing stemma, divitision A-D and loros, in r. hand, large patriarchal cross, in l., scepter; in l. field, star.

Rev. Uncertain.

All four coins are rather poorly preserved, but 15A and B can be seen to differ from 15C and D. A and B show traces of the bust or the Virgin orans on the reverse, while the reverse of D clearly depicts the armed bust of a military saint. It is unlikely that the identical obverse would have been combined with two different reverses. Close examination of the obverses, however, reveals no difference except the top of the emperor's loros, as shown in Fig. 1.





Fig. 1

16. Obv. Half length figures of emperor, l., and St. Demetrius, nim-A-C bate, holding long cross between; above, star within schematic cloud. The emperor wears stemma, divitision and loros, in l. hand, sword resting on l. shoulder.

Rev. Winged patriarchal cross.

A-Longuet 18a LPC 234, no. 3 1.58 g (Longuet—)
B-Longuet 18b 1.06 g (Longuet—)
C-Longuet 18c 0.79 g (Longuet—)
16B is overstruck on a denier of John Orsini of Epirus.

17. Obv. Full length figure of emperor, wearing stemma, divitision and A-K loros, large patriarchal cross in each hand.

Rev. Bust of St. Demetrius, nimbate, wearing tunic, breastplate and sagion, in r. hand, sword resting on r. shoulder, in l. shield.



```
LPC 236, no. 6
A-Longuet 14a
                                 1.40 g (Longuet 1.45 g)
B-Longuet 14b
                                 1.26 g (Longuet 1.30 g)
C-Longuet 14c
                                 1.15 g (Longuet 1.10 g)
                                 1.10 g (Longuet 1.10 g)
D-Longuet 14d
                                 0.99 g (Longuet 1.10 g)
E-Longuet 14e
F-Longuet 14f
                                 0.73 g (Longuet 0.70 g)
                                 0.81 g (Longuet—)
G-Longuet 31
H-Longuet 32
                                 0.55 g (Longuet—)
I-Longuet 34
                                 0.99 g (Longuet—)
J-Longuet-
                                 1.67 g (Longuet—)
K-Longuet 15e
                                 0.59 g (Longuet—)
```

17G, H, I, and K are overstruck on deniers of John Orsini of Epirus; 17J is overstruck on Type 14 (Longuet 21; *LPC* 208, no. 6), which is itself overstruck on a specimen of *LPC* 224, no. 31 (Plate 26, 1).

- 18. Obv. Full length figure of emperor, wearing stemma, divitision and A-H loros; in r. hand, lis, in l., scepter cruciger; stars all around.
  - Rev. St. Demetrius, beardless and nimbate, wearing tunic, breastplate and sagion, seated upon backless throne, holding sword across knees.

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A-Longuet 19a
               LPC 238, no. 7
                                1.59 g (Longuet 1.80 g)
B-Longuet 19b
                                 1.75 g (Longuet 1.75 g)
C-Longuet 19c
                                 1.39 g brockage (Longuet 1.40 g)
D-Longuet 19d
                                 1.75 g (Longuet 1.75 g)
E-Longuet 19e
                                 0.74 g (Longuet 0.75 g)
F-Longuet 19f
                                 1.13 g broken (Longuet—)
G-Longuet 19g
                                 1.08 g broken (Longuet—)
H-Longuet-
                                 0.67 g (Longuet—)
18B and G are overstruck on a specimen of Type 17 (Longuet 14; LPC
236, no. 6). 18E and H are overstruck on deniers of John Orsini of
Epirus.
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- 19. Obv. Full length figure of emperor, wearing stemma, divitision and loros; in r. hand, patriarchal cross, in l., scepter (?).
  - Rev. Palaeologan monogram.

Longuet 16; LPC—; 0.56 g, broken (Longuet—). Possibly struck on a denier tournois.

20. Obv. Emperor I., wearing stemma, divitision, collar piece and loros, crouching r. in proskynesis before facing figure of Christ, r. wearing tunic and colobion, blessing emperor.



Rev. Bust of St. Demetrius, beardless and nimbate, wearing tunic, breastplate and sagion; in r. hand, sword over r. shoulder, in l., shield.

Longuet 2; LPC 234, no. 1/260, no. 3; 1.18 g (Longuet 1.20 g). This coin is overstruck on a specimen of Type 17 (Longuet 14; LPC 236, no. 6).

- 21. Obv. Half length figures of two emperors holding a long cross A-B between them, each wearing stemma, divitision and loros. R. figure (John) places l. hand on chest.
  - Rev. Bust of St. Demetrius, nimbate, wearing tunic, breastplate and sagion; in r. hand, sword over r. shoulder, in l., shield.

    A-Longuet 10; LPC 246, no. 1; 1.13 g (Longuet 1.20 g). B-Longuet 12, LPC 258, no. 2; 0.58 g, broken (Longuet 0.60 g). 21A and B represent the same type. 21A has been overstruck or, more likely, struck from a die which had started to break up. Longuet attributed the type to Anna and John V because he considered that the left-hand figure on 21A wore an empress's crown. The coin is deficient in detail at the essential point, however. A specimen in Bertele's Dossier, 5 illustrated by a rubbing of a comparatively well struck coin, is identified as "Giovanni V e VI." On 21A the legend can clearly be read on the right. A positive identification must await the discovery of a better preserved coin.
- 22. Obv. Full length figure of emperor, l.; small figure of junior emperor, r., both wearing stemma, divitision and loros, and holding scepters in r. and l. hands respectively; stars in lower l. and upper r. fields.
  - Rev. Full length figure of St. Michael, winged and nimbate, standing, wearing tunic, breastplate and sagion, holding sword over r. shoulder.

A-Longuet 11a LPC 224, no. 1

1.11 g, doublestruck (Longuet 1.15g)

B-Longuet 11b

0.99 g (Longuet 0.95 g)

C-Longuet 11c

0.90 g, brockage (Longuet 0.90 g)

D-Longuet 11d

0.99 g, broken (Longuet—)

E-Longuet 25

0.47 g (Longuet—)

22C seems to be overstruck, and the undertype is possibly Type 15.

22C seems to be overstruck, and the undertype is possibly Type 15. A specimen of Type 22, however, acquired by the author after publica-



<sup>&</sup>lt;sup>5</sup> T. Bertele, "Monete Bizantine 1242–1453." Uned. ms. catalogue (184 pp.) with photographs and descriptions of late Byzantine Coins.

tion of LPC, is clearly overstruck on Type 21 (Plate 26,2). This overstrike means, of course, that the identifications proposed in LPC cannot be correct. In LPC the order of 21 and 22 was reversed. The Longuet attribution of Type 21 to Anna of Savoy and John V was retained, while Type 22 was assigned to Andronicus III and John V. This attribution was arrived at partly because Longuet's overstrike was correctly discounted and partly because coins of John V and VI at Constantinople always depict the two emperors of equal size, for, by the beginning of their joint reign, John V was 16 years old. On the other hand, there exists a basilikon which does depict a full size Andronicus III and a small figure of John V (LPC 120, no. 7). The author considers this basilikon to be an issue from the end of Andronicus III's reign, while Professor Grierson prefers to see it as an early issue of John V with a post-humous representation of Andronicus III.6

The new overstrike hardly clarifies the situation. A feasible solution could be that Type 21 represents Anna of Savoy and John V. If the gold coins depicting Andronicus III and Christ, together with Anna and John, were struck in Andronicus III's reign, then the Thessalonican authorities would know that it was permissible to depict the emperor's wife and son on the coinage. They may have decided to devote an issue to them —after all, designing a new type annually which differed radically from previous issues cannot have been an easy task. This issue could well have been followed by a type representing Andronicus III and John V where, again following the Constantinopolitan example, John was shown smaller than his father.

It is difficult to believe that these coins belong to the reign of John V and VI. For the first three years of their joint reign, Thessalonica was ruled by the Zealots who had nominally supported John V in the first Civil War. From 1351 the city was controlled by John V's faction, who would hardly have represented him as smaller than John VI, even if he was the younger emperor. In any case, the style of the coins is earlier than that of the Pella hoard coins, and the type, therefore, must date from ca. A.D. 1340. The right hand figure must be not only the junior emperor but also a juvenile, and it is hard to envisage who it can be other than John V.

## 23. Obv. Uncertain.

Rev. Nimbate bust of armed saint (?)

Longuet 24; 1.19 g (Longuet—). There are faint indications of two figures on the obverse, and the coin could, therefore, be a specimen of *LPC* 234, no. 2.

<sup>6</sup> P. Grierson, Byzantine Coins (London, 1983), p. 299, type A.



- 24. Obv. IOhS DESPOTVS around Castle.
- A-D Rev. DE ARTA CASTRV around cross.

A-Longuet 26 Schlumberger, 0.53 g (Longuet—)
B-Longuet 27 pl. 13, no. 167 0.47 g (Longuet—)
C-Longuet 28 1.30 g (Longuet—)
D-Longuet— 0.96 g (Longuet—)

All specimens except 24A have been overstruck or at least turned somewhat convex. On none of them can be seen the slightest traces of any Byzantine overstrikes.

25. An octagonal flan.

Longuet-0.59 g (Longuet-)

The patination indicates that this flan could have belonged originally to the hoard.

#### COINS NOT ORIGINALLY IN THE HOARD

26. Another specimen of Type 17.

Longuet 14; LPC 236, no. 6; 1.62 g (Longuet—). A brockage with a glossy black patina.

- 27. Obv. Full length figure of emperor, wearing stemma, divitision, collar piece and loros; holds in each hand, large B.
  - Rev. Brockage.

Longuet—; LPC 224, no. 32; 0.57 g (Longuet—). This coin has already been published by Longuet, "Notes de Numismatique Byzantine," RN 1938, p. 17, no. 21 and pl. 2.

#### **OVERSTRIKES**

Although all the overstrikes are listed in the catalogue, clarification of the sequence is provided by the schematic representation in Figure 2.8



<sup>&</sup>lt;sup>7</sup> G. Schlumberger, Numismatique de l'Orient Latin (Graz, 1954), pp. 374-75.

<sup>&</sup>lt;sup>8</sup> My grateful thanks to P. J. Donald for providing the illustrations for figures 1 and 2.

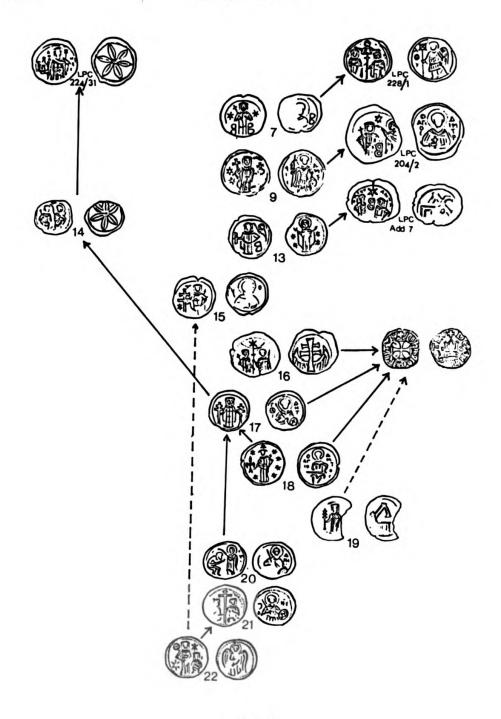


Fig. 2

#### DENOMINATIONS

It is interesting to find Byzantine copper stamena overstruck on deniers tournois, which are generally considered to be billon coins. The deniers show no sign of containing silver, but a low content of about five percent would not necessarily be visible to the naked eye. As far as the author is aware, there have not been any analyses of the late deniers of Arta. The Byzantines obviously did not consider the deniers of John Orsini to be intrinsically more valuable than their own stamena, and indeed, they may not have been.

Although the coins of John Orsini are not common and form, as Metcalf has pointed out, only one or two percent of the currency in Frankish Greece, they are found in larger quantity in Bulgaria, in whose affairs Andronicus III intervened during the brief period A.D. 1330-32.

#### **DATING**

The key to the dating of the hoard lies in the exact date of the deniers of John Orsini of Epirus, on whose coins three if not four of the Byzantine issues are overstruck.

Longuet misread the dates of John Orsini, publishing them as 1323–25 instead of 1323–35, as given by Schlumberger. Recent research, however, extends John's reign until the end of 1336 or, more probably, the beginning of 1337. There is documentary evidence in the form of the last will and testament of St. Neilos Erichiotes of the monastery at Geromeri, in Epirus, which was dated December 1336 and which was confirmed by John Orsini. The document exists only in a later copy but is believed to be genuine by D. Nicol.

On his coins John bears the title Despot, which was bestowed upon him by Andronicus III at the end of the first civil war in 1328 or 1329. While we do not know if John's coinage commenced immediately upon his assumption of the title Despot or lasted until his death, the years



<sup>&</sup>lt;sup>9</sup> D. M. Metcalf, Coinage in South-Eastern Europe 820-1396 Royal Numismatic Society Special Publication 11 (London, 1979), p. 287.

<sup>10</sup> I am indebted to D. Nicol for the following information.

1329 to 1336 must be considered as the period of issue for his deniers. Thus, Types 15–22 must all date after 1330. These eight types are so linked to the deniers tournois and to each other that it is possible that they represent consecutive issues at the end of the reign of Andronicus III. In view of the number of overstrikes on certain of the other types in the hoard (nos. 7, 9, 13, and 14), Types 1–14 should predate John Orsini's coinage, for otherwise they should be found overstruck on his deniers also.

Types 11-14 are quite flat, stylistically similar to Types 15-22 but more worn and in two cases, present in quantity. They probably date to the early 1330s. Types 1, 2, and 3 are issues of Andronicus II, but at present, Types 4-10 cannot be divided between the later years of Andronicus II and the earliest years of Andronicus III, for at Thessalonica, unlike at Constantinople, Michael IX did not appear regularly on the coinage after 1290.

Types 21 and 22 are the latest in the hoard, and they must date to ca. 1340–42. When publishing the Pella hoard, the author suggested a gap in the production of coinage at Thessalonica during the Zealots' revolt of 1342–50 because of the strikingly different composition of the Salonica and Pella hoards and because of the different styles of coins in the two hoards. The Pella hoard contained only one coin of a type comparable to those in the Salonica hoard (Plate 26, 3). The remaining seven coins bore the figures of an emperor and empress who can only be John V and Anna of Savoy (Plate 26, 4). These coins were struck while Anna was empress in Thessalonica between August 1351 and 1365. The two series are of quite disparate styles, as can plainly be seen by comparing the rendering of the emperors' features, in particular (Plate 26, 5).

There are several reasons for postulating a gap in production in the coinage at Thessalonica:

- 1) the difference in style;
- 2) the difference in wear between the horseman coin and all the other coins in the Pella hoard;
- 3) the general lack of Salonica hoard types in the Pella hoard—types that should have been present in some quantity if the two series had been completely consecutive; and



4) most importantly, the fact that while the coins of John V and Anna of Savoy are often overstruck, the undertypes are always other coins of John and Anna, and never earlier coins of the types found in the Salonica hoard. This applies to all coins of this series, and not just to those in the Pella hoard. In the Salonica hoard are coins which are struck on issues 10 or 15 years earlier. If the coins in the Salonica hoard were struck up until 1350, then they might clearly be expected to supply the undertypes for overstrikes in the Pella hoard.

All these arguments point to the fact that there was a hiatus in the production of coinage at Thessalonica during the Zealot revolt and confirms a closing date of ca. 1340-42 for the Salonica hoard.

#### CONCLUSION

The Salonica hoard must contain most, if not all, of the issues of Andronicus III from Thessalonica, as well as a certain number of earlier issues from the middle to later years of Andronicus II. The hoard is unusual in having such a high proportion of overstrikes when compared, for example, with coins of the same types in the collection at Dumbarton Oaks. The existence of so many overstrikes holds out great hopes for the complete elucidation of this series of coins by means of future discoveries. Future advances in the study of the late Palaeologan coinage need not rely necessarily on the discovery of new hoards but also on the close examination of existing coins in public and private collections. Past advances have depended greatly upon the efforts of Dr. Longuet, whose Salonica hoard indicated the path toward a more detailed picture of the fourteenth century Thessalonican coinage.



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# THE NUMISMATIC EVIDENCE FOR THE RECONSTRUCTION OF THE AKSUMITE ROYAL LINE

(PLATES 27-32)

WOLFGANG R. O. HAHN

In one of Mani's speeches (allegedly authentic, and written down on his orders, but after his death), the founder of the Manichaean religion mentioned Aksum as one of the four great powers of his age, the other three being the Roman, the Persian and a further empire which is either China or the state of the Kushans in India.¹ This statement should refer to a date about A.D. 270, a time when the Aksumites also entered the political sphere of the Romans, as we know from a somewhat controversial quotation in the Vita Aureliani included in the Historia Augusta² (revised about the end of the fourth century). Only a few records on the contacts of Aksum with the other empires have come down to us. From these we can guess that there might have been frequent diplomatic relations with both Rome and the Sasanians of Persia.

<sup>&</sup>lt;sup>1</sup> Cephalaia 77, in C. Schmidt, ed., Manichäische Handschriften der Staatlichen Museen von Berlin 1 (Stuttgart, 1940), pp. 188-89. This paper is an extended version of a lecture given at the 125th anniversary meeting of the American Numismatic Society on 10 September 1983.

<sup>&</sup>lt;sup>2</sup> 33, 4 in H. Peter, ed. (Lipsiae, 1884), p. 173. For the interpretation of this reference, see J. Straub, "Aurelian und die Axumiten," IV Congresso internazionale di studi Etiopici (Roma 10-15 aprile, 1972) 1 (sezione storica); Academia nazionale dei lincei, anno CCLXXI-1974 Quaderno 191: Problemi attuali di sziena e di cultura (Roma, 1974), pp. 55-73 = Antiquitas (1976), pp. 269-89.

Its position dominating the outlet of the Red Sea into the Indian Ocean was of strategic importance for trade as well as military politics and so the Aksumites were sought after as allies by both sides. This situation continued until the rise of Islam intervened and isolated them, following which the state declined into its dark ages.

The intermediate 350 years of Aksumite power, from the end of the third to the middle of the seventh century, also produced a fairly continuous coinage of high numismatic interest. It represents the sudden and limited appearance of a Greek monetary culture in a region far away in the south, where there had been no coined money issued before, nor would there be afterward for a long time. Trade and prestige combined brought this coinage into existence and effected its propagation through the main harbor of Adulis (near modern Massawa) which was Aksum's doorway to the world; because of the difficult terrain, the land route from Egypt was hardly used by traders. Although Aksumite traders took part in the maritime trade with India,4 Aksum never was a naval power. Its military might consisted of widely feared infantry armies used to subdue the African tribes in its sphere of interest and to exact tribute from them. We know of armed caravans sent into the far interior of Africa to collect ivory and gold nuggets,5 the latter being the source of the Aksumite gold coinage.

As is so often the case with such exotic regions, the coinage is the primary source of Aksumite history; it gives us a continuous and coherent body of information while the other sources are fragmentary and distorted. To pass them in short review: first, there are the occasional references in historical, geographical or hagiographic works written in the Romano-Byzantine-Syrian world and suffering from great distance



<sup>&</sup>lt;sup>8</sup> Compare S. C. Munro-Hay, "The Foreign Trade of the Axumite Port of Audulis," Azania 17 (1982), pp. 107-25 and L. P. Kirwan, "The Christian Topography of Cosmas and the Kingdom of Aksum," Geographical Journal 138, 2 (June 1982), pp. 267-77.

<sup>&</sup>lt;sup>4</sup> R. Pankhurst, "The History of Ethiopia's Relations with India Prior to the 19th C.," IV Congresso (above, n. 2), pp. 205-11.

<sup>&</sup>lt;sup>5</sup> E. O. Winstedt, ed., Cosmas Indocopleusthes 2, 52 (Cambridge, Eng., 1909), p. 71.

<sup>&</sup>lt;sup>6</sup> For more information, see Y. Kobischhanov, *Axum*, trans. L. T. Kapitanoff (University Park, 1979), pp. 247-81; appropriately reviewed by S. C. Munro-Hay in *Azania* 14 (1979), pp. 21-30.

either in space or in time. Second, there is an indigenous literary tradition represented by kings' lists and legendary writings preserved in written versions only from the later Middle Ages, but certainly based on old memories not forgotten during the so called dark ages of Ethiopia, when the old civilization was destroyed by waves of foreign incursions. Third, we have to take account of the epigraphic sources, which, beside our coins, consist of the monumental inscriptions set up by the kings to immortalize their victorious campaigns. The practice of erecting such monuments was certainly borrowed from the Sasanians; this is shown by the desire to render them trilingual like the triumphal inscriptions of the Sasanian kings. For this purpose, the Aksumite kings had to construct pseudo-Sabaean versions beside the Greek and Geez texts of their inscriptions. We know of about a dozen different royal inscriptions or fragments of inscriptions. Unfortunately most of them belong to the two kings best known from coins and ancient authors, whereas the few other kings' names are difficult to identify with the names found on the coins. Moreover, some of the monumental inscriptions have aroused much controversy concerning their religious testimony.

Finally we have the archaeological evidence which, however, will lack established chronology until we have reconstructed the sequence of the kings from their coins. Someday there is a chance that undisturbed layers in a carefully controlled excavation will provide a relative chronology for the stray coin finds. Excavations carried out in Aksum thus far have provided only meager evidence of this kind, as the layers are mostly disturbed.

Analysis of the coins should not only enable us to set up the framework of Aksumite history but also tell us more about the economic and political radius of the Aksumite realm, including, for example, the extent of its influence in Southern Arabia, where we can judge the duration of the Aksumite hegemony only by the coin finds. Assembling all the material necessary for such an analysis was a very slow process during the past years of numismatic research. Aksumite coins were



<sup>&</sup>lt;sup>7</sup> H. de Contenson, "Les fouilles à Axoum en 1958, rapport préliminaire," Annales d'Ethiopie 5 (1963), pp. 3-16 and H. N. Chittick, "Excavations at Aksum 1973-74," Azania 9 (1975), pp. 159-205.

first made known to scholars during the first half of the nineteenth century by travelers. The beginning of excavations in the early twentieth century and the activity of several ambitious collectors so enriched the body of available material that Arturo Anzani<sup>8</sup> thought it possible to compile a corpus of all coins known in 1926, with additions through 1941. The results of Anzani's work have, however, proved unsatisfactory, particularly because his attempts at dating were based upon no more than his own intuition. Others, especially authors of catalogues for collectors, gave exact dates<sup>9</sup> derived from the unreliable kings' lists of the later Ethiopian tradition. Moreover, Aksumite numismatics became a playground for historians, such as Franz Altheim<sup>10</sup> and Jacqueline Pirenne,<sup>11</sup> who had no numismatic training, but were eager to prove their theories by using coins as they wanted to view them.

The situation began to change for the better only in recent years, when a British scholar, Stuart Munro-Hay, who took part in the excavation campaign in Aksum during the early 70s, made a new survey of the whole topic.<sup>12</sup> He amassed a body of material amounting to over 2,000 coins and applied new methods such as metallurgical analyses and, occasionally, die comparison. His results were published in a series of articles,<sup>13</sup> most of them in periodicals with which numismatists are

- <sup>8</sup> A. Anzani, "Numismatic Axumita," 1, RIN 1926, pp. 5-100; 2, RIN 1928, pp. 5-64. 3 RIN 1941, pp. 49-73 and 113-29; cited hereafter as Anz.
- <sup>9</sup> E.g. M. Mitchiner, Oriental Coins and Their Values: The Ancient and Classical World 600 B.C.-A.D. 600 (London, 1978), p. 97; cited hereafter as Mitchiner and to a certain extent, the widely used booklet by F. Vaccaro, Monete di Aksum (Mantova, 1967); cited hereafter as Vacc.
- <sup>10</sup> His latest survey of Aksumite history is to be found in *Christentum am Roten Meer* 1 (Berlin, 1971), pp. 393-460.
- <sup>11</sup> J. Pirenne, "Le cadre chronologique de l'histoire ethiopienne du 1ve au vie siècle," Actes du XXIVe congress internationale des Orientalistes, Études Semitiques (Paris, 1975), pp. 48-54; and "L'imbroglio de trois siècle de chronologie aksumite: 1ve-vie s.," Documents pour servir à l'histoire des civilisations ethiopiennes, fasc. 6 (Paris, 1975), pp. 49-58.
- 12 S. C. Munro-Hay, "The Chronology of Aksum, a Reappraisal of the History and Development of the Aksumite State from Numismatic and Archaeological Evidence," unpubl. diss. (Univ. of London, 1978).
- 13 S. C. Munro-Hay, "Mhdys and Ebana, Kings of Aksum, Some Problems of Dating and Identity," Azania 14 (1979), pp. 21-30; "'Ezānā (Ezana/Ezanas), Some Numismatic Comments," Azania 15 (1981), pp. 109-19; "Aksumite Addenda,



usually not acquainted, but a new catalogue is said to be forthcoming. He has reached a new level of reliability in dating which, although undoubtedly convincing in the general chronology, needs to be examined for possible further refinement. My own studies on the Aksumite coinage date back to a time before I knew of Hay's activities, but they were stimulated afterward by personal acquaintance and discussion with him. My own ideas should by all means only be taken as working hypotheses based on numismatic argumentation with the aim to instigate an ongoing pursuit of Aksumite history.

The literary sources provide only two certain clues regarding the absolute chronology of the Aksumite coin series: the existence of a King Ezanas about 350 and of a King Caleb with his second name Ella Asbeha about 525; both kings are fairly well representated in the coinage. The other names of kings given by epigraphical or literary sources are difficult to identify with those found on the coins. This is partly due to the various transformations of names, as they were written in different languages, especially when the writers had no knowledge of the other languages and wrote down information, including names, received orally. Moreover, the kings each seem to have had more than one name, probably at least three: a personal name, a regnal name and an ethnicon or gentilicum, the meaning of the last being very uncertain and disputed. We are unable to trace a form of protocol well enough to know when the different names were to be used. Furthermore, it is likely that several kings shared the same name. This has led to severe controversies among scholars; for instance, whether there was more than one Ezanas.14

Our main guide for the disentangling of the Aksumite coin series is the close observation of their typology with regard to the development

the Existence of 'bis Anioskal'", Rassegna di Studi Etiopici 28 (1980-81), pp. 57-60; "A Tyranny of Sources: The History of Aksum from its Coinage," Northeast African Studies 3, 3 (1981/82), pp. 1-16; "A New Issue of King Nezool of Aksum in the Collection of the American Numismatic Society," ANSMN 27 (1982), pp. 180-84; (above, n. 3), pp. 107-25; and W. A. Oddy and S. C. Munro-Hay, "The Specific Gravity Analysis of the Gold Coins of Aksum," in D. M. Metcalf and W. A. Oddy. eds., Metallurgy in Numismatics 1, The Royal Numismatic Society Special Publication no. 13 (London, 1980), pp. 73-82.



<sup>&</sup>lt;sup>14</sup> See Munro-Hay, "Ezana," (above, n. 13), pp. 109-19.

of pictorial devices and legends, original creations and imitations. Almost equally important is the metrological evidence derived from the analysis of weights and metal compositions constituting the standard of the coinage. To anticipate the results in short: the coins belong to 22 different kings of whom some have the same name (Ousanas, Wazebas) and others figure under different versions of their names. The whole series of coins can be condensed into a shorter span of time than was assumed hitherto, from ca. A.D. 297 to ca. 641, and it is not a sequence of a single line of kings. We have to take several joint reigns into account, not unlike the situation in the later Roman empire. This is not only shown by parallel streams in the development of Aksumite coinage, but also suggested by various hints from the other sources, such as the letter of Emperor Constantius II written in 356 and addressed to both kings of Aksum, the brothers Ezanas and Saizanas. The name of the latter is also mentioned in a monumental inscription of the former;16 both are further attested by the hagiographical report on the Christianization of Ethiopia<sup>17</sup> and the kings' lists<sup>18</sup> mention several joint reigns. The date of the Christianization which is a question heavily disputed lately can be placed beyond any doubt in the middle of the fourth century by the numismatic evidence as it is documented on the coins by spectacular typological changes.

The following sketch<sup>19</sup> of the numismatic history is intended only to present the major coin types with commentary on their signi-



<sup>&</sup>lt;sup>15</sup> Preserved in Athanasius, Apologia ad Constantium, in J. P. Milne, ed., Patrologica Graeca 25 (Paris, 1834), p. 636.

<sup>&</sup>lt;sup>16</sup> E. Littman, Deutsche Aksum-Expedition 4: Sabäische, griechische und allabessinsiche Inscripten (Berlin, 1913), no. 7; hereafter cited as DAE.

<sup>17</sup> E. A. T. W. Budge, trans., The Book of the Saints of the Ethiopian Church: A Translation of the Ethiopian Synaxarium 4 (Cambridge, Eng., 1928), pp. 1164-65. The Synaxium is thought to have been compiled at the end of the twelfth century; the original story is told by Rufinus of Aquileia († 410). Historia Ecclesiastica, in J. P. Migne, ed., Patrologica Latina 21 (Paris, 1878), pp. 478-80, but this was in turn perhaps only a translation from a lost book of Gelasius of Caesarea († 395).

<sup>&</sup>lt;sup>18</sup> The kings' lists were published by C. Conti-Rossini, "Les listes des rois d'Aksoum," Journal Asiatique 14 (1909), pp. 259-320.

 $<sup>^{19}</sup>$  For a full discussion of Aksum's numismatic history, refer to my article, "Die Münzpragung des Axumitischen Reiches," *Litterae Numismaticae Vindoboneses* 2 (1983), pp. 113-80. Munro-Hay and myself have set forth out our differences in a joint forthcoming article (JNG).

ficance for our understanding of Aksumite history and on the methodological approach by which they can be interpreted. The oldest coins of Aksum are those of a king Endybis (nos. 1-3); his name and title Endybis basileus Aksomiton bisi Daky is written in Greek which seems to have been the lingua franca of the seafaring traders on the Indian route. We know of an earlier Aksumite king, the Zoskales of the Periplus maris Erythraei (a manual for sailors from the second or third century A.D.)20 who had command of Greek. This language and script was maintained on all Aksumite gold coins except for a single issue of the earliest period, where the native Geez was used, a semitic language written in characters derived from the Sabaean script of Southern Arabia. The Geez replaced the Greek legends only on the silver and copper issues as late as during the first half of the sixth century, that is to say in the last third of the entire duration of Aksumite coinage. The inscriptions on the gold coins, on the other hand, remained Greek throughout. There is one Ethiopic expression only transcribed into Greek, the word bisi meaning "man" followed by a geographical term: in the case of Endybis it is bisi Daky, man of Dakuen. The original meaning of this so called ethnicon or gentilicum has not yet been explained.21 It seems that each king had a different ethnicon which suggests that the ethnicon has nothing to do with royal clans. Only the first five coin striking kings used it on their coins, but we know from other sources that the later kings also had such names in their titulary.

The coin type of Endybis has not yet adopted all the features characteristic of the Aksumite inventory, but it starts with some of the main ones: there is the double representation of the king's bust, one on each side of the coin, and he wears a cap which can be identified as the same royal symbol worn by the Nubian kings of Meroë.<sup>22</sup> On it is superimposed a crescent, the symbol of the war god Mahrem (Greek Ares), known to us from many archaeological objects from the Red Sea area.<sup>23</sup> On the



<sup>&</sup>lt;sup>20</sup> H. Frisk, "Les Periple de la Mer Erythree," Göteborgs Högskolas Årsskrift 33 (1927), p. 2, n. 5.

<sup>21</sup> Compare Kobishchanov (above, n. 6), pp. 209-13.

<sup>&</sup>lt;sup>22</sup> U. Timp, "Aksum und der Untergang Meroës," unpubl. diss. (Univ. Münster, 1972-74), pp. 15f.

<sup>23</sup> E.g. on stelae; Kobishchanov (above, n. 6), p. 229.

gold coins the king's bust is flanked by grain stalks, a design especially significant on Aksumite coinage. It is perhaps not only an evocation of the prosperity and provisioning of the Aksumite people, but could also have been intended to refer to the weight standard of the coins.

Endybis issued coins in all three metals, gold, silver and copper, all on the same weight standard which can be connected with the Roman aureus standard based on 1/60 of the Roman pound. But the Aksumite coins were struck to the next lower fraction which was 1/120 of the pound, so that the Aksumite gold coin equalled half a Roman aureus. Whereas the Roman pound is based on the carat, the seed of the carob tree, it seems possible that the Aksumite weight system was based on a grain unit known later to the Arabs. The weight of the barley corn of 0.063 g is about one third of the Roman carat of 0.19 g so that the standards fit well together.<sup>24</sup> Expressed in barley corns the first Aksumite coins would have had an intended weight of 45 of these units. The choice of this standard which was only maintained during the earliest period of the Aksumite coinage is an important clue for the dating of the first issue. After some decades of unstable floating, the Roman aureus was restored to a weight of 1/60th of a pound by Diocletian in 290;25 this gives a certain terminus post quem for the Endybis coins. Their fabric with high relief and, compared to the later development, relatively thick flans, resembles the fabric of the Alexandrian tetradrachms, the production of which ended in 296;26 perhaps moneyers from there took part in the initiation of Aksumite minting.

As was pointed out, the cap worn by Endybis on both sides of the coins could indicate a connection with the Nubian kingdom of Meroë which was destroyed sometime about 300, possibly during the Romano-Persian war of 296/7,27 when Aksum seems to have been allied with the Sasanians and let its vassal tribes march against Meroë, which was a Roman protectorate. The Aksumites seem to have considered themselves as rightful successors to the kings of Meroë and the geogra-



<sup>&</sup>lt;sup>24</sup> See W. Ridgeway, The Origins of Metallic Currency and Weight Standards (Cambridge, Engl., 1892), p. 179.

<sup>&</sup>lt;sup>25</sup> RIC 5, 2, p. 20.

<sup>&</sup>lt;sup>26</sup> RIC 6, p. 646.

<sup>&</sup>lt;sup>27</sup> Thus suggested by A. J. Drewes, *Inscriptions de l'Éthiopie antique* (Leiden, 1962), p. 105.

phical term Aethiopia was transfered from Nubia to Abyssinia by this time.<sup>28</sup> It could be possible that this was exactly the moment when the Aksumite king felt ready to strike his own coins out of prestige; it is the more notable that he did so in all three metals, including gold. This was of course easy for him, because he had a gold supply at his disposal, but it was also an attempt to demonstrate equality with the Roman, Persian and Kushan rulers. The fact that the Aksumite coins were only half the size of the Roman aurei is perhaps significant.

Endybis's gold (no. 1) is fairly common, which may be a result of one or more large hoards of clandestine provenance. Metallic analysis<sup>29</sup> has shown about 90% fineness which is a relatively high percentage of gold and was probably intended to be pure; the refining methods might have been rather crude as can be inferred from the wide deviations within one and the same ruler and coin type. The bronze coins (no. 3) of Endybis contain a small amount of silver which was perhaps caused by the remelting of Roman coins, e.g. of Alexandrian tetradrachms of which a few unconfirmed stray finds have been reported from Aksum.

The three kings following Endybis were Aphilas, Ousanas I and Wazebas. These three minted on the same gold standard; then it was changed following the adoption of the solidus as the standard gold coin throughout the Roman empire. This coin, with a weight of 1/72nd of the pound, was lighter than the aureus by one-sixth. This standard could only be enforced in the eastern half of the Roman empire after its conquest by Constantine I in 324.30 So the first period of the Aksumite coinage adhering to the heavier weight standard amounts to some 30 years. The coins of Aphilas, Ousanas I and Wazebas I are notable for a further typological development. The standard gold coin (no. 4) took a new obverse design: the king is now shown at half length and crowned by a high tiara of Meroïtic origin; he also holds a spear trans-

<sup>31</sup> Timp (above, n. 22), pp. 19-21.



<sup>28</sup> See Altheim (above, n. 10), p. 400.

<sup>&</sup>lt;sup>29</sup> The figures given by Oddy and Munro-Hay (above, n. 13), pp. 73-82 on the basis of specific gravity readings have been checked by microchemical analysis done at the Institute of Inorganic Chemistry of the Vienna University (R. Mauterer); the results of a representative Aksumite coin series (not only of gold, but also of silver and some copper coins) are published in the article quoted in note 19.

**<sup>30</sup>** RIC 7, pp. 1-18 and 64-78.

verse before him, whereas his representation on the reverse keeps the cap and is augmented only by a palm branch in his hand. This is apparently to be interpreted as representative of the double role of the king as warlord and peace keeper. The posture of the king on the obverse could have been inspired by Roman medallions which were likely to have been brought to Aksum by envoys as presentation pieces. The bearing of the spear in this mode is only to be found on very rare examples such as one of Licinius II of the year 319.<sup>32</sup> Furthermore, the Licinii also used frontal busts on some of their coins during the years 321–22<sup>33</sup> which was likewise imitated by Aphilas on his gold fractions (no. 5), as well as on some of his copper coins (nos. 10, 11). These Roman reminiscences give a suitable chronological clue when connected with the metrological evidence.

The silver coins of Aphilas also have developed to a new stage. His early silver (no. 7) continues the Endybis model, but in the course of his reign it is replaced by a somewhat lighter coin (no. 8) with a different reverse: the king's bust is reduced to fit into the continuous circular legend from which it is separated by a linear border; the field between is gilded. The occurrence of partial gilding is a characteristic feature of Aksumite coinage seen on many silver or copper issues from then onward. Originally it might have been intended as a measure to raise the value of the silver coins in order to make up for the reduction in weight, the cause of which was perhaps a shortage of silver. Later it was probably only a means of imposing a noble aspect to the coins, as it is always applied to the sacral parts of the design, either providing the king with a sort of nimbus or later adorning the representations of the Christian cross. The procedure must have been laborious; an examination by a scanning electron microscope has shown that it was effected by fire gilding using amalgam.

The same transition from the older to the new silver coins can be observed for Ousanas I (nos. 13-14) as for Aphilas which is only to be explained by assuming that both kings ruled contemporaneously. Ousanas I can perhaps be identified with the great king Sembrouthes;



<sup>32</sup> RIC 7 (Aquileia), no. 31.

<sup>33</sup> RIC 7 (Antioch), nos. 32, 33.

three monumental inscriptions<sup>34</sup> show him to have enjoyed a reign of at least 27 years (by counting his regnal years). This identification is based on the supposition that the name Ousanas is only the Greek translation of the Ethiopian name Sembrouthes, both meaning a rich man,<sup>35</sup> and furthermore, on the conjectural reconstruction of the fragmentary first line of one of the inscriptions<sup>36</sup> in which the king's gentilicium could have read bisi Gisene as on the coins of Ousanas I.

In his later reign Ousanas I probably ruled together with another king, Wazebas I, perhaps the successor of Aphilas. We know of a diemule comprising an obverse of Wazebas I and a reverse of Ousanas who used to have his name attached to the reverse on this type. The very rare coins of Wazebas I (nos. 15–16) who seems to have reigned only briefly, but is also mentioned on a Himyaritic inscription from Southern Arabia,<sup>37</sup> bear legends in Geez; this earliest occurrence of the native script on coins, however, is still isolated.

During the later part of Ousanas I's reign, the adoption of the Roman solidus standard mentioned above made the coins lighter by one-sixth giving the gold coin the weight of a Roman semissis equal to 12 carats or 36 barley corns. The long reign of his successor, the famous Ezanas, from about 330 to 370, saw a further change in metrology as well as in typology. After the middle of the fourth century which was marked by the Christianization of the coins, a significant reduction by one-fourth took place; thus the standard reached the level of 9 carats or 1.7 g. There it remained for the next 250 years until the end of the Axumite gold coinage. This diminution by one-fourth is very likely to be connected with a change of the weight system from the barley to the wheat grain, exactly one-fourth lighter, so that the relationship remained



<sup>&</sup>lt;sup>34</sup> One is *DAE* no. 3; the second is the so-called Meroë inscription published by R. Lepsius, *Denkmäler aus Ägypten und Äthiopien* (Berlin, 1913), p. 13, no. 1; and the third is the so-called Adulitana 2, recorded in *Cosmas Indicopleusthes* 2, 60-63 (above, n. 5), pp. 74-76.

<sup>35</sup> For the etymology of the name Sembrouthes, see F. Altheim, Die Araber in der Alten Welt 5, 2 (Berlin, 1969), p. 170.

<sup>36</sup> DAE no. 3.

<sup>&</sup>lt;sup>37</sup> J. Ryckmans, "Inscriptions historiques sabéennes de l'Arabie centrale," Le Muséon 66 (Louvain, 1953), no. 535.

stable, but at a lighter scale. A sixth century text<sup>38</sup> mentions gold coins (in connection with taxation in Southern Arabia) which contained 12 carats; these must have been lighter carats consisting of three wheat grains, not three barley corns, because the heavier standard had been abandoned in Aksum almost 200 years earlier. The composition of Ezanas's late gold coins also tends to depreciate. Provided that a somewhat over 90% fineness can be taken as intentionally pure, the coins with nine carats gross weight and a reduced fine weight of eight carats would be equal in value to the tremissis or third solidus, the production of which was initiated in the Roman empire by 383. The tremissis, however, was of a very high fineness, about 96–98% against the average of about 80% of the new Aksumite coin, a difference offset by the lower weight of the tremissis.

The typological innovations during the reign of Ezanas were caused by the introduction of Christianity to the Aksumite government about the middle of the fourth century. The literary records for this are somewhat contradictory, so that hypotheses have arisen among historians dividing Ezanas into at least two different rulers.<sup>39</sup> The later Ezanas thus created would then receive the honor of becoming the first Christian monarch of Ethiopia by adopting the Monophysitic creed. This would have happened only after the Council of Chalcedon in 451. But the alleged Monophysitic character of Ezanas's Christian inscriptions is mere speculation by overcritical interpreters and their flimsy argumentation has to cede to the numismatic evidence.

The coinage of Ezanas is a coherent body belonging to one single ruler and showing the transition from pagan to Christian symbols. The crescent above the king's head (no. 17) was abolished and from then onward many issues have a small cross in its place dividing the obverse legend (no. 21). The fact that the pagan as well as the Christian coins with the name of Ezanas were issued by the same king is proved by the ethnicon, which is always given as bisi Alene. Within the Christian coin group two variants in the starting point of the obverse legend and the termination of Ezanas's name (nos. 21a, b) are noteworthy. Although



<sup>38</sup> Martyrium Sancti Arethae et Sociorum in Civitate Negran, in M. Carpantier, ed., Acta Sanctorum 10 (Brussels, 1861), pp. 721-62, especially p. 723.

<sup>39</sup> Discussed and refuted by Munro-Hay (above, n. 14), pp. 109-19.

both belong to the same king with identical ethnicon, their circulation area seems to have been different; one has provenances from Ethiopia, the other from Southern Arabia. This was probably due to the payments for the Aksumite garrisons in the Yemenite region, but I do not suppose a second mint there. More likely, all the Aksumite coins were produced in a single mint, located either in Aksum or in Adulis; special issues might have been struck for Southern Arabia and then shipped there. During the approximately 175 years until the end of Aksumite suzerainty in Yemen by the 30s of the sixth century, the Aksumite gold coins of known provenance are almost exclusively from that area. This should be more than a coincidence, although the possibility that this concentration exists only because of the chance locations of the sites hitherto excavated in Ethiopia cannot be excluded.

As can be accepted from the other sources, Ezanas had a co-ruler named Saizana or Sazanas whom we should expect also to have struck coins according to the precedents. In fact there are some silver and copper coins of a king Ousanas using types similar to those of Ezanas which are not to be given to the earlier king Ousanas. The later Ousanas seems to have had no gold coinage of his own, but his pagan copper (no. 24) is complementary to Ezanas, and a later silver type without religious symbols (no. 25) exactly matches a silver issue of Ezanas (no. 22b). He ought therefore to be the same person as the Saizanas of the other sources. Variants of what seems to be the name of a single ruler occur several times,41 e.g. in the case of a king one and a half centuries later whose name is alternatively given as Nezana (nos. 38a-c) or Nezool (nos. 38d, e) on his gold coins; the correlation between the two names is confirmed by die links. In addition, on one of his silver coins (no. 40), the obverse legend reads Nezana in Greek accompanied by a Geez monogram certainly to be resolved as Nezool. In the typological sequence this king happens to be the father of Caleb, who calls himself son of Thezana on his gold coins, so that we have even a third variant of his name. Therefore the identification of the second Ousanas



<sup>&</sup>lt;sup>40</sup> First recognized by T. V. Buttrey, "Axumite Addenda," Rassegna di Studi Ethiopici 25 (Rome, 1971-72), pp. 44-52, especially p. 45.

<sup>&</sup>lt;sup>41</sup> Besides the Nezana / Nezool / Thezana example discussed here, the equation of Allamidas / Allamirius (no. 44a, b) can also be brought to bear.

with Saizanas should meet no obstacles, especially since the form Ousanas could be a Greek rendering of an Ethiopian name. On the silver and copper coins of Ezanas (nos. 22, 23) and Ousanas II (nos. 24, 25) the double rim makes its first appearance at about the same time, when it was also introduced on the Sasanian coinage.<sup>42</sup>

The end of the fourth and the course of the fifth century saw the development of a cross design filling the whole reverse field, first on the copper, then also on the silver coins. Its appearance could be a genuine Ethiopian creation, because it perhaps started a little earlier than the comparable copper type in the Roman empire which is dated from 402.43 The first Aksumite coins with this cross have a gilded spot hollowed into the center (no. 30). These coins are of copper and were struck by a king whose name is supposed to have been Mattew. He uses Geez legends, which was still unusual on coins at this time and the script is unvocalized, giving the king's name as Mhds. Although the vowels, based on Indian models,44 were introduced into Geez in order to facilitate the translation of the Bible, presumably at the same time as the conversion, they occur only occasionally on some silver coins during the last quarter of the sixth century (nos.  $51^2$ ,  $69^2$ ) some two centuries later. The reverse legend begins a series of mottoes which refer to the king's policy; in this case reading: "through the cross has he conquered" which recalls the famous "in hoc signo vinces."

The fifth century coinage of Aksum is characterized by a tendency to immobilize anonymous types in all three metals (nos. 31-33, 36), particularly on copper coins. This small change was struck in large quantities over many decades and even found its way outside the Aksumite sphere, where it mingled with Roman minor coinage. It is represented in Egyptian hoards<sup>45</sup> of minimi and in stray finds throughout Palestine,<sup>46</sup> brought there by Ethiopian pilgrims. The presence of these



<sup>&</sup>lt;sup>42</sup> See R. Göbl, Sasanidische Numismatik (Braunschweig, 1968), p. 1.

<sup>43</sup> Carson, LRBC 2221 (Constantinople) and 2927 (Alexandria).

<sup>44</sup> Altheim (above, n. 35), p. 177.

<sup>&</sup>lt;sup>45</sup> Found at Qaw al-Kabir; J. G. Milne, "Feudal Currency in Roman Egypt," Ancient Egypt 1926, p. 5 and at Hawara; F. Petrie, Hawara, Biahmu and Arsinoë (London, 1889), p. 13.

 $<sup>^{46}</sup>$  INJ 3 (1965/66), p. 76 from Caesarea and INJ 5 (1981), pp. 57-59 from Jerusalem and Beth-Shean. A recent hoard from Baalbek also included some anonymous Aksumite copper.

coins in Palestine confirms that the religious ties between Aksum and Jerusalem are as old as Christianity in Ethiopia.<sup>47</sup> The Ethiopian church began to develop a legendary tradition of tracing back the nation's origins to King Solomon and to model Aksum as a second Jerusalem<sup>48</sup> only when the Sasanians and after them the Arabs captured the holy city in the first half of the seventh century.

Of the famous king Caleb, ally of the Byzantine emperors Justin I and Justinian I and defender of Christianity in Southern Arabia against Jewish aspirations, we know the full nomenclature from epigraphic sources: Caleb Ella Asbeha bisi Lazan; all his coins call him Caleb alone. Starting with him, most of the following kings have personal names taken from the Old Testament.<sup>49</sup> He also finally replaced the Greek with Geez legends on the silver coins (no. 42). One of his close successors, called Israel, also changed the copper in this manner (no. 47). Judging from an inscription of the Himyarite subruler Sumuyafa Ashwa,<sup>50</sup> which was erected about 530 and makes reference to the kings of Aksum as his overlords, applying the plural form, Caleb seems to have had a co-ruler in his later years. The gold coins of a king, whose name is either given as Alla(a)midas or Allamiruis (no. 44) certainly corresponding to the Ethiopian Ella Amida, are very close in style and lettering to the later issue of Caleb (no. 41d).

The next clue to absolute chronology is the strong typological influence of Byzantine coins, again expressed by frontal portraits. Gold coins of a king Gersem (no. 50) which show him holding a globus cruciger and wearing a crown with pendilia seem to imitate a type of Tiberius II struck about 580.<sup>51</sup> Even closer to a Byzantine prototype is a silver type of king Joel (no. 57) who is represented with a cuirass and a helmet very similar to some Carthaginian half siliquae of Maurice around 590;<sup>52</sup> here also the cross on the reverse and the size of the coins correspond to the Byzantine coin.



<sup>&</sup>lt;sup>47</sup> E. Cerulli, Etiopi in Palestina 1 (Rome, 1943).

<sup>48</sup> Altheim (above, n. 10), pp. 454-60.

<sup>&</sup>lt;sup>49</sup> Caleb, Israel, Iathlia, Gersem, Joel and Hataza.

<sup>&</sup>lt;sup>50</sup> Published by J. Ryckmans, "Une inscription chrétienne sabéenne aux musées d'Antiquités d'Istanbul," Le Muséon 59 (1946), pp. 171-72, see especially lines 3 and 7.

<sup>&</sup>lt;sup>51</sup> MIB 2, p. 10.

<sup>52</sup> MIB 2, nos. 57 and 58.

The transition from profile to frontal busts can be observed simultaneously within the coinage of three kings, Gersem, Joel and Hataza, who therefore seem to have reigned conjointly in the last quarter of the sixth century. They issued the last known gold coins of Aksum inscribed in Greek. The last two kings who struck coins seem to have had no gold issues, only silver and copper pieces are known; analyses have shown that the silver includes a certain amount of lead not present in earlier silver coins. From this observation we can suppose that the former metal supply, which should have been a form of native electrum providing gold and silver for the coinage when separated, had been exhausted; therefore no gold coins of the last two kings are to be expected. The end of the gold coinage coincided with the final loss of Aksumite influence in South Arabia which was conquered by the Sasanians between 575 and 599.

The silver coins of the last two kings in the sequence, Wazenaz and Armaha, are especially interesting because of their religious types: Wazenaz (no. 69) included a piece of sacred architecture on the reverse; the gilded cross is set beneath a brick arch recalling tombs excavated in Aksum. That this is an allusion to the Holy Sepulcer of Jerusalem cannot be ruled out. The following silver type of king Armaha (no. 71) is even more elaborate: it could perhaps be interpreted as a symbolic representation of the entire church of the Holy Sepulcer, built out of Mount Calvary with the three crosses above and the grave with the round entrance-locking stone below. It is easy to imagine that these types were inspired by the fall of Jerusalem which aroused much religious zeal from 614.

Armaha is also mentioned in Arabic chronicle writing<sup>54</sup> as the son of the Ethiopian king who aided the earliest followers of Muhammad and whom Muhammad invited to accept Islam. This hope did not materialize and soon after Muhammad's death, the struggle for dominance of the Red Sea began.<sup>55</sup> This conflict finally cut off Aksum from international trade as well as from its contacts with Byzantium and thus



<sup>53</sup> Munro-Hay (above, n. 12), p. 160.

<sup>&</sup>lt;sup>54</sup> M. J. Goeje, ed., Annales quos scripsit Abu Djafar Mohammed ibn Djarir at-Tabari, ser. 1 (Leiden, 1881), pp. 1568-72.

<sup>&</sup>lt;sup>55</sup> Adulis seems to have been sacked as early as 641, certainly it was destroyed at the beginning of the eighth century; compare Munro-Hay (above, n. 10).

reduced it once more to an African petty state of mere local importance with neither economic nor prestige reasons to continue striking coins. The extant older coins may have served ceremonial purposes for a while.

Reviewed as a whole, Aksumite coinage should be seen as a peculiar by-product of Romano-Persian competition for political and economic power. Developed at the periphery of civilization, it shows unique and genuine features such as the light carat standard, based on wheat grains, and the partial gilding of silver and copper pieces, as well as typological inspirations from Byzantium and to a lesser degree, from Persia at times. Because it is the principal guide to the history of Aksum, the reconstruction of its chronology by means of modern numismatic methods is a promising task. Perhaps the most spectacular result is the decisive settling of the debate on the date of Ethiopia's Christianization by confirming the traditional fourth century view deeply rooted in the ideology of the country.

#### **ILLUSTRATIONS**

The illustrations represent the full range of the types known.<sup>56</sup> To faciliate identifications the list is combined with Anz. and Vacc. references and the dates proposed by me. Sources of the illustrations are marked with an asterisk.

Endybis bisi Daku (en), end of third century.

- 1. A Anz. 1-3, Vacc. 1, \*Berlin.
- 2. AR Anz. IIN2 and III 2/1, Vacc. 2, \*ANS.
- 3. Æ \*Vacc. 3.

Aphilas bisi Dimele, first quarter of fourth century.

- 4. A Anz. 5-10, Vacc. 4-5, \*Berlin.
- 5. A, half \*Munro-Hay Coll.
- 6. A, one eight Anz. 4 and III 3/2-4, Vacc. 6, \*Munro-Hay Coll.



<sup>56</sup> For full descriptions and metrological notes, refer to my article (above, n. 19).

- 7. R, earlier Anz. III 5/1, Vacc. 7, \*Munro-Hay Coll.
- 8. A, later Anz. III 8/1, Vacc. 8, \*Sternberg 8, 16-17 Nov. 1978, 343; hereafter cited as Sternberg.
- 9. Æ Anz. 13, Vacc. 9, \*Hahn Coll.
- 10. Æ Anz. III 6/2, \*Vacc. 10.
- 11. Æ Anz. 12, \*BM.

Ousanas I bisi Gisene (= Sembruthes Ella Amida?), first three decades of fourth century.

- 12a. A Anz. 15, 16, Vacc. 11, \*BM.
- 12b. A Anz. 17; \*Munro-Hay Coll.
- 13a. A, earlier Vacc. 13, \*Mitchener 375.
- 13b. A, earlier Anz. 18, 19 and III 11/2-3, \*Sternberg 344.
- 13c. AR, earlier, \*Anz. II N9.
- 14. R, later Anz. II N18 and III 13/1-5, Vacc. 12, \*Ashmolean.

Wazebas I bisi Zagali, 20s of fourth century.

- 15. A Anz. 20, Vacc. 15, \*Paris.
- 16. A Anz. II N11 and III 17/1-3, \*Munro-Hay Coll. (1 and 2).

14/16. (hybrid) AR \*Anz. III 15/1.

Ezanas bisi Alene (Ella Abreha?), pagan ca. 330—shortly before 350.

- 17. A Anz. 21-28, Vacc. 18, \*ANS.
- 18. AR Anz. 14, Vacc. 19, \*Hahn Coll.
- 19. Æ Vacc. 20; \*Münz Zentrum 44, Nov. 1981, 421.
- 20. Æ Anz. 30, 31, Vacc. 25, \*BM.

Ezanas, Christian shortly before 350-ca. 370.

- 21a. A Anz. 32-38, Vacc. 23, \*ANS.
- 21b. A Anz. 39-42, Vacc. 21, 22, \*Munro-Hay Coll.
- 22a. AR \*In trade.
- 22b. A Anz. II N16, Vacc. 24, \*Munro-Hay Coll.
- 23. Æ Vacc. 26; \*Münz Zentrum 24, May 1976, 254.

Ousanas II (= Sazanas? Ella Asbeha?), pagan ca 330—shortly before 350.

24. Æ Anz. 14a, Vacc. 14, \*JNFA 3 (1974), AE 22.



Ousanas II, Christian third quarter of fourth century.

25. AR Anz. II N7 and III 12, Vacc. 42, \*44, \*Sternberg 347.

Wazebas II (bisi Hadefan?), 60s-70s of fourth century.

26. Æ Anz. 71-80, Vacc. 29, \*BM.

(27. vacat).

Eon bisi Anaaph, fourth quarter of fourth century.

28a. A Anz. 85-93, Vacc. 39, \*BM, \*Sternberg 361.

28b. A \*Munro-Hay Coll.

Anonymous, second half of fourth century.

29. AR \*Anz. IIN12, Vacc. 37.

Mehadios, first quarter of fifth century.

30. Æ Anz. 81-83, Vacc. 35; \*Sternberg 358.

Anonymous, first half of fifth century.

31. A Anz. 94, 95, Vacc. 36, \*BM.

32. AR Anz. 70a, Vacc. 27, \*Sternberg 349.

33. Æ Anz. 44-70, Vacc. 28, \*Sternberg 349, \*Ashmolean.

Ebana, about the middle of the fifth century.

34. A Anz. 96-127, Vacc. 38, \*Munro-Hay Coll. (1 and 2).

35. AR Anz. 191, 192, Vacc. 45, \*Sternberg 365.

Anonymous, from the middle of the fifth through the first quarter of the sixth century.

36. Æ Anz. 153-176b, Vacc. 34, \*Sternberg 356, \*BM.

Ousa(n)a(s) III, second half of fifth century.

37a. A Anz. 182-187, Vacc. 40, \*Munro-Hay Coll.

37b. A Anz. 181, Vacc. 43, Vienna\*.

37c. A Anz. 190, \*Sternberg 362.

37d. A Vacc. 41, \*ANS.

P37 AR \*Munro-Hay Coll.



Nezana = Nezoōl (= Tazena, Thezana), last third of fifth century.

38a. A Vacc. 46, \*Glendining, Feb. 1972, 103.

38b. A \*Vacc. 47.

38c. A Anz. 177, \*Berlin.

38d. A Anz. 179, 180, Vacc. 49, \*Sternberg 367.

38e. A \*ANS.

39a. A \*Glendining, Feb. 1972, 104.

39b. A \*Vacc. 36.

40. AR Anz. 178, Vacc. 40, \*Sternberg 366.

Caleb (Ella Asheba bisi Lazan), ca. 510—to ca. 540.

41a. A \*Anz. 134.

41b. A Anz. 128-133 and II 029, Vacc. 31, \*Vienna.

41c. A Anz. 134-149, Vacc. 30, \*Sternberg 354.

41d. A Vacc. 32, \*Hahn Coll.

42. AR Vacc. 33, \*BM.

43. Æ Anz. 150-152 and II 030, \*BM.

Alla(a) midas = Allamiruis, 30s or 40s of sixth century.

44a. A Vacc. 53, 54, \*Altheim Coll.

44b. A Anz. 194, Vacc. 52, \*Viennese Private Coll.

Ellagabaz, ca. 550.

45. A Anz. 195-197, Vacc. 55, \*Viennese Private Coll.

Israel, third quarter of sixth century.

46. A Anz. 216-249, Vacc. 50, \*Berlin.

47. Æ Vacc. 51, \*Altheim Coll.

Iathlia, third quarter of sixth century.

48. A' \*Anz. 250.

Gersem, last quarter of sixth century.

49. A Anz. 276-278; \*Viennese Private Coll.

50. A \*Vacc. 64.

51. A Vacc. 65, \*Sternberg 375, \*Mitchener 419.

52. Æ, earlier \*Anz. II 043.

53. Æ, later Anz. 279 and II 053, Vacc. 66, \*Sternberg 376.



Joel, last quarter of sixth century.

- 54. A Anz. 199, Vacc. 56, \*BM.
- 55. A Anz. 198, \*Viennese Private Coll.
- 56. AR, earlier Vacc. 58, \*Nascia FPL, Nov. 1980, 94.
- 57. AR, later Vacc. 57, \*Sternberg 368.
- 58. Æ, earlier \*Anz. II 032.
- 59. Æ, earlier Anz. 200-207 and II 041, Vacc. 60; \*Sternberg 372, 2, \*Ashmolean.
- 60. Æ, later \*Drawing by Munro-Hay.
- 61a. Æ, later \*Kunst und Münzen AG Lugano, FPL 50, Nov. 1982, 606.
- 61b. Æ, later Anz. 208-214 and II 042, Vacc. 59, \*Sternberg 370.

Hataza, last quarter of sixth century—beginning of seventh century.

- 62. A, earlier \*Vacc. 70, \*Christie's June 1969, 170.
- 63. A, later, Vacc. 69; \*Münz Zentrum 44, Nov. 1981, 434.
- 64. Æ, earlier \*ANS.
- 65. Æ, later Anz. 282-300 and II 054, Vacc. 71, \*ANS.
- 66. Æ, later Anz. 270-275, Vacc. 72, \*Ashmolean.

Wazenaz, first quarter seventh century.

- 67. AR \*Altheim Coll.
- 68. AR \*Mitchener 422.
- 69. A Anz. II 047, Vacc. 61, \*Ashmolean, \*Sternberg 373, \*Copenhagen.
- 70. Æ Anz. 253–258 and II 046, Vacc. 63, \*Sternberg 374.

Armaha, ca. 630—middle of seventh century.

- 71. R Anz. 272 and II 049, Vacc. 67, \*Sternberg 377.
- 72a. Æ Anz. 260-271, Vacc. 68, \*Sternberg 378.
- 72b. Æ Anz. 259, \*Stockholm.

#### **Forgeries**

- a, h, \*Tringalli Coll.
- b, c, d, f, g, i, j, k, l, m, \*ANS.
- e, \*University of Vienna.
- n, \*Vacc. 73.



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# AN UNUSUAL FĀTIMID GLASS WEIGHT

PAUL BALOG

Thanks to the generosity of my very good friend Nicholas Dürr of Geneva I was able to study a new variety of Fātimid glass weight which I had not seen before. It deserves attention mainly for its unique shape, but also for the fact that it weighs four canonic dirhems or dirhems kayl. There is nothing among the Fātimid glass weights, şanajāt, which is similar to it in shape and in weight. The Fātimid glass coin weights and before them the Umayyad and 'Abbāsid glass coin weights consist, without a single exception, of smaller or larger flat, round discs bearing an inscription. The Umayyad and 'Abbasid coin weights almost always bear the issuing official's name and usually the denomination; some are anonymous. The Fātimid sanajāt always bear the protocol or the name of the Caliph; the mention of the denomination, although it occurs, is extremely rare. The superficial resemblance of the glass coin weights to coins was noted by the authors as early as the first part of the nineteenth century, some of whom judged them all to be subsidiary coins, without any discrimination.

ED. Note: This article was received by the ANS shortly after the death of Paul Balog in November 1982. The object itself is now in the ANS collection, as a bequest of Balog (1983.117.1).



All early Islamic weights in Egypt were made of glass. I know of one exception, a ten dirhem kayl anonymous 'Abbāsid bronze barrel weight of the second half of the second C.H.¹ A few other bronze weights come from the eastern provinces of Islam. The Fāṭimids, however, radically changed their weight system. They retained glass for the manufacture of the coin weights,² but employed lead for the heavy or commercial weights³ and bronze for silver and gold (5, 10, 25 and 50 units of the dirhem kayl and the dinar).⁴ The bronze weights came into current use only after the Fāṭimids conquered Egypt; the earliest bear the name of al-Ḥākim, followed by some of al-Mustanṣir, al-Āmir and al-'Āḍid.

As mentioned, glass weights were used under the Fāṭimids as coin weights. They were round and flat, stamped with the protocol of the Caliph, and conformed to the weight of the double dinar, the dinar and the quarter dinar for gold, and to the double dirhem, the dirhem, the half, the quarter and the one-eighth of the dirhem kayl for silver. There was no larger denomination than the double dinar and the double dirhem, as there was no weight for the kharrūba or 1/16th of the dirhem, a silver coin which circulated exclusively in Sicily. Mme Launois has already remarked on the great difficulty in differentiating between the various weight units, even to recognize which weights belong to the dinar system and which ones to that of the dirhem. Not only do the Fāṭimid ṣanajāt almost never bear a denomination, there is even no recognizable color pattern and it is impossible to differentiate one kind from the other without weighing each piece against a known weight.



<sup>&</sup>lt;sup>1</sup> P. Balog, "Islamic Bronze Weights from Egypt," JESHO 13 (1970), p. 244.

<sup>&</sup>lt;sup>2</sup> al-Muqaddasī, in M. J. Goeje, ed., Kitāb aḥsān al-taqāsim, Bibliotheca geographorum Arabicorum, vol. 3 (Leiden, 1906), p. 240.

<sup>&</sup>lt;sup>3</sup> M. Jungfleisch, "Un poids fatimite en plomb," Bulletin de l'Institute d'Égypte 9 (1927), pp. 115–28; P. Balog, "Poids forts fatimites en plomb," RBN 1959, pp. 171–88.

<sup>&</sup>lt;sup>4</sup> P. Balog, "Poids et estampilles en verre et en bronze musulmans du Musée d'Art et d'Histoire de Genève," Genava 1973, pp. 297-318.

<sup>&</sup>lt;sup>5</sup> A. Launois, "Estampilles, poids, étalons monétaires et autres disques musulmanes en verre," Bulletin d'Études Orientales 22 (1969), pp. 71-72; the text cited there is of the Mamlûk era.



The object which we present has a quite unusual form. It consists of a glass rod which is roughly shaped, measures 74 mm in length, is between 7 and 9 mm thick and was, during the process of manufacture, compressed on both sides unevenly. The lower end was flattened by the application of a die so that the object now looks like a spoon with a flattened oval head of 28 mm length and 18 mm width. The spoon head bears the legends of the coin weight of the Caliph al-Zāhir li-'Izāz Dīn Allāh, listed and illustrated in "The Fāṭimid Glass Jeton," no. 183.6 The object is very well preserved, and is of transparent green glass with a yellowish tinge, covered to a certain extent by a light grey patina. The surface of the glass is firm, smooth and even the original sheen is present. Only a small, very superficial abrasion of 3 mm diameter mars the perfection of the glass, but the loss of material can only be a

<sup>&</sup>lt;sup>6</sup> P. Balog, "The Fāṭimid Glass Jeton," AIIN 20 (1973), p. 123.

few milligrams. The piece weighs exactly 11.780 grams which is 12 centigrams short of the weight of four dirhem kayl. The loss of weight is therefore about one percent. This is the first Fāṭimid four dirhem kayl weight which, to my knowledge, has ever been found.

The largest denomination in the dirhem series of the Fāṭimid glass weights is the double dirhem and consists of a flat, inscribed round disk. The strange flattened spoon-shaped object which has been presented here is undoubtedly a four dirhem kayl coin weight and to date unique in both shape and weight.

Almost all the modern authors have accepted the information given by al-Muqaddasī that the Fāṭimid coin weights were always made of glass. Nevertheless it is now known that commencing with al-Ḥākim bronze coin weights exist. It may be interesting to note that the curiously-shaped four dirhem glass weight belongs to the initial period when the ṣanajāt started to increase in number. The earliest larger bronze weights, representing the multiples of the dirhem and the dinar, begin only under al-Mustanṣir. The present four dirhem glass weight so curiously shaped may belong to an experimental period of changing monetary circumstances.

<sup>7</sup> P. Balog, "Contributions to the Arabic Metrology and Coinage," AIIN 27-28 (1982), pp. 115-35.



(PLATES 33-34)

MICHAEL BROOME

Amongst the many types of Maria Theresia talers (MTT) dated 1780 is one that has long puzzled students of the series. It is characterized by simple clear engraving, an unflattering bust of the Empress with a long supercilious nose, and the small letters ST engraved above the normal S.F. below the bust¹ (Plate 33, 1). Recent research has established that MTTs were minted in Milan (from 1787) and Venice (from 1817)² and that the types used at those mints, although similar to contemporary productions from Vienna, had a distinctive reverse design (Plate 33, 2). There are a number of minor differences but the most obvious are the arrangement of tail feathers on the reverse, and the four pearls separating the jewels on the band of the main crown (Plate 33, 3 and 4). The type with ST has the same characteristics and it has been accepted for some time that it probably originated in Italy.³ A specimen in the National Collection in Vienna carries a more definite attribution to Florence; but another specimen in the same collection is described as

<sup>&</sup>lt;sup>1</sup> See M. R. Broome, "The 1780 Restrike Talers of Maria Theresia," NC 1972, pp. 231-32 and pl. 22-23, type 15.

<sup>&</sup>lt;sup>2</sup> F. Leypold proposed the attribution in "Der Mariatheresientaler 1780: Versuch der typisierung und zeitlichen Ordnung," NZ 1971, pp. 71-72, and published an authentic coin struck in 1815 in Milan in "Der Mariatheresiantaler 1780: Ergänzen zu Numismatische Zeitschrift, Bd. 86," NZ 1975, p. 54. The dating of particular varieties follows the results, as yet unpublished, of research by the present author.

<sup>&</sup>lt;sup>3</sup> E.g. by C. von Ernst in "Die Münzbuchstaben S.F., F.S., T.S.-I.F. auf der Kaiserin Maria Theresia mit der Jahreszahl 1780," NZ 1896, p. 308.

struck in Venice in 1834 for trade with the Orient. The production of MTTs in Florence in 1814 and again in 1828 is noted by Pagani<sup>4</sup> who adds that these pieces were indistinguishable from the regular Austrian restrikes. The ST coins could therefore not be part of these issues and Leypold, who noted a reference in the Florence mint archives dated 20 January 1814 implying that talers would be cheap to strike, has in fact tentatively attributed them to Milan.<sup>5</sup>

In drawing together material for a paper on the whole series of MTTs, this particular type was reexamined and note was taken of a number of peculiarities not found elsewhere. The most striking feature is the hard-faced bust. This could never have been issued by an Austrian-controlled mint but might be appropriate for one of the many enemies Austria had made during its period of rule in northern Italy. Another distinctive feature is the lettering. This is larger and finer than the regular Austrian restrikes but arranged carelessly around the flan (Plate 33, 5). Finally, the edge inscription not only uses different arabesque similar to the Milanese talers, but, uniquely amongst the restrikes, divides the motto IUSTITIA ET CLEMENTIA before ET instead of after it, on the irons used for lettering the edge.

This type is not at all common but an examination of the few available specimens showed that almost every one came from a different combination of dies. Furthermore, each obverse die has a slightly different bust. Presumably the dies were not produced from a single matrix as was the custom at Austrian-controlled mints. These features may indicate either a small mint or an intermittent production of coins. Finally, the flan diameters range from 40 to 41 mm, indicating the use of blanks similar to those employed at Milan from 1787 but larger than the new coins struck there from 1814 onward. It seemed possible therefore that the ST talers were first produced sometime between those two dates.

An examination was made of all silver crown-size coins issued in and around northern Italy during that period to see if any were stylistically



<sup>&</sup>lt;sup>4</sup> A. Pagani in Monete Italiane dall'Invasione Napoleonica al Giorni Nostri (1796–1963) (Milan, 1965), p. 203.

<sup>&</sup>lt;sup>5</sup> F. Leypold Der Maria-Theresien-taler 1780 (Levantelaler) (Wiener Neustadt, 1976), p. 28.

<sup>&</sup>lt;sup>6</sup> M. R. Broome, "The Chronology of Maria Theresia Talers," unpubl. ms.

similar to the talers. The period 1787-1814 coincides almost exactly with the Napoleonic rule of France and Italy but none of the finelyproduced designs of Tiollier bears the slightest resemblance to the crude and ugly busts on the talers. While there are similarities in the proportions of the letters, those on the ST talers are larger and obviously not produced by the same punches. Because the mint in Florence was considered a possible place of production, careful attention was paid to the Florentine denars and francescones but their style is quite unlike that of the talers and the lettering is much smaller. Interestingly, the very small series of 5-franci coins from the neighboring city of Lucca, although similar in style to the Florentine pieces, has rather larger lettering (Plate 34, 6). Close examination shows that the letters are very similar to those found on the talers (Plate 34, 7, cf. 33, 5). When allowance is made for the lengthening of the letters caused by the talers being struck without a collar,7 there seems little doubt that the same letter punches had been used in each case. If so the talers and the 5-franci pieces were presumably struck at the same mint.

The Principality of Lucca and Piombino was founded by Napoleon on 24 June 1805 and ruled until 1814 by Elisa Baciocchi, his sister and, by all accounts, an astute business woman. Although her large coins are dated 1805 to 1808 (and possibly to 1810) they were not minted, according to Massagli, before 1810. Although Lucca had its own mint and struck large silver coins in the eighteenth century, this appears to have been closed down by 1810. A contract was therefore placed with the mint at Florence, a city that had come under Elisa's control when she was made Grand Duchess of Tuscany in 1809. If the Luccan coins were being minted at Florence, then it is most probable that the talers

<sup>&</sup>lt;sup>8</sup> D. Massagli, Introduzione alla Storia della Zecca e Delle Monete Lucchesi (Lucca, 1870, repr. 1976), pp. 121 quotes a record of the Florence mint that on 24 November 1810, an order was placed by the Lucca mint for the striking of 6,000 5-franci pieces dated 1806 and 1807. It was followed by another order on 4 May 1811 of 200,000 francs, mostly for 5-franci coins.



<sup>&</sup>lt;sup>7</sup> For a discussion of the fishtailing of letters produced when striking coins without a collar see G. P. Dyer and P. P. Gasper, "The Striking of Proof and Pattern Coins in the Eighteenth Century," *BNJ* 1980, pp. 117-27. More research is needed to explain the variation in fishtailing found in the pre-1780 series of talers and the reasons for the fishtailing found on some working dies, e.g. those used at Birmingham in 1953.

were also, thus continuing the long tradition of supplying trade coins to the Near East but now in direct opposition to Austria.9

The first use of talers would probably have been around 1814. Napoleon had expressly forbidden their production at Marseilles on the grounds that the French coins were good enough for anyone if only the French officials would try hard enough to get them accepted. It is possible that his strong-willed sister had not sought his approval to mint the Florentine talers, but because the letter punches were not in existence until 1810 and were then intended for the Luccan coins, it is probable that the taler dies were not cut until Napoleon's fall in 1814.

If the 1814 striking noted by Pagani is in fact the one with ST, the 1828 issue could also be so marked. Inspection shows that there are two varieties, distinguishable by the shape of the number 1 in the date. On some coins the base of the digit is a skewed zig-zag, similar to the type found on Austrian coinage of the period 1780–90, while others have a convex serif. The first type seems to be slightly larger, with a mean diameter of 41–41.5 mm, while the second type is 40.5–41 mm, but very few specimens are available and this difference may be illusory. A study of the edge lettering also revealed the same two varieties but the problem of their chronological sequence was unresolved. Fortunately, a specimen has now appeared with a bust that is much closer to the official Milan restrikes of 1787<sup>11</sup> (Plate 34, 8). This is almost certain to be early in the series and it shows the zig-zag termination of the 1. A



<sup>&</sup>lt;sup>9</sup> "Talleros for the Levant" had been minted under Peter Leopold (1765-90) and earlier. Gold ducats of Venetian style for trade with the Levant were still being minted in 1805 under the Bourbon rule of Charles Louis and Maria Louise. See for example, O. Rinaldi, Le monete coniate in Italia dalla Rivoluzione Francese ai nostri giorni (Mantua, 1954), p. 103.

<sup>10</sup> E. Zay in Histoire Monétaire des Colonies Françaises (Paris, 1892), p. 242 noted that Gaillard, the Director of the Marseilles mint in 1788 had acquired letters-patent authorizing the production of MTTs for the Levant. However a manuscript second edition in the Bibliothèque Nationale, Paris, made available by courtesy of Gilles Hennequin, notes that in 1802, the Director was refused permission by Napoleon to mint talers.

<sup>&</sup>lt;sup>11</sup> A good illustration of an early Milan taler appears in M. J. Price, ed., Coins: an Illustrated Survey, 650 BC to the Present Day (London, 1980), p. 188, fig. 854 (where it is erroneously attributed to the Günzburg mint).

close examination of the lettering reinforces this argument. Letters on the "early" variety follow the Luccan prototype whereas some letters on the second variety, particularly the R, O and G, are different and presumably were produced by replacement punches.

In conclusion, this type of MTT was minted in Florence ca. 1814 or possibly a little earlier. The two varieties described may represent either a continuous series or two separate bursts of activity, possibly in 1814 and 1824–34.

The problem of the letters ST remains. Perhaps they were added to avoid the charge of forgery, when Austria was the most powerful country in southern Europe. If so, the letters should have a specific meaning. One possibility is that the S stands for Giovanni Antonio Santarelli, a famous Florentine engraver who is known to have engraved medals for Elisa and is reputed to have cut the dies for her coinage.12 The T should then stand for the man responsible for minting the coins. No named individual fits the bill but it is intriguing to note that a T appears unobtrusively on the Florentine francescones dated 1803-7 with the mint name PISIS. Unlike the larger denars which are named to Florence and bear an LS monogram for Luigi Siries, the current die engraver (Plate 34, 9), the PISIS pieces (which were nevertheless minted in Florence) appear to include the letter T in the monogram<sup>13</sup> (Plate 34, 10). This addition has gone unrecorded in the major catalogues but it is fairly clear on the coins. If the enigmatic T was in charge of production of the PISIS francescones he could well have produced Elisa's 5-franci pieces (which bear no identifying letters at all) and also been available for the ST talers. This is of course pure conjecture and provides no real evidence for the meaning of the letters ST which must await further research.

<sup>18</sup> The monogram could also be read LSF, i.e. Luigi Siries Fecit, in which case it gives no clue to the meaning of the letter T on the talers. However there seems no reason why the F (or T) should have been omitted from the larger and more imposing denars.



<sup>12</sup> L. S. Forrer, Biographical Dictionary of Medallists 5 (London, 1912), p. 335 summarizes Santarelli's works but is doubtful about the Luccan coinage. The busts on the medals seem very similar to those on the coins but the lettering is different. Alternatively the S could stand for Luigi Siries, a die engraver whose initials LS appear on Florentine coins between 1801 and 1806.

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## THE NORTH CAROLINA RAILROAD HOARD

(PLATE 35)

RICHARD G. DOTY

While periods of great upheaval and defeat form attractive subjects for historians, those who would write about them are commonly faced with a major problem. They are likely to encounter a dearth of information at the very point where they would most welcome it. The reasons are not difficult to discover: in any era, qualified eyewitnesses are in short supply; in a time of defeat and collapse, they are likely to have far more important concerns than the dispassionate writing of history. And the aftermath of the failure of a cause is likely to tamper with or destroy much of the evidence which was originally set down on paper. The dichotomy between intention and possibility widens.

Nowhere is this gap between the desire to write about a period and the ability to do so more pronounced than in the case of the Confederate States of America, particularly during the year 1865. We know what happened militarily, of course; indeed, we could have predicted it had there been no eyewitness accounts. But the life of a nation or of a section of a nation is not entirely bound up with military considerations; in the case of the waning Confederacy, we know much less about civilian affairs than military ones. In some areas, we may see an entire pattern, but dimly. In others, we may see a bright patch of color, a chance remark by a diarist, for example, which makes the surrounding darkness seem even blacker than it would otherwise be. And in still other areas, we see nothing, because nothing has survived.



Things are at their darkest when we speak of numismatics. An earlier article<sup>1</sup> has examined the problem in some detail; here, merely let it be noted that, due to destruction of records, any statement on Confederate currency production can only be inferential, based on surviving notes and their serial numbers. And this exercise begs an entire series of questions: what kind of money was in circulation at the end of the Confederacy in the spring of 1865? Did new Confederacy notes predominate, as they were supposed to do by law,<sup>2</sup> or did older issues still form the bulk of commercial paper? What were the places of state and municipal issues and private bank notes? Where did notes come from? Was circulation purely local, or, as in the North, was it more widely spread? Did other sorts of paper also enter commerce, as one might expect in days of economic emergency? In short, what was the average citizen using for money during those last weeks?

There seemed to be no way of answering this second series of questions. One would need a compact accumulation of materials, a hoard, which could be clearly dated to the spring of 1865, and the existence of such a cache was highly unlikely. Nevertheless, one does exist.

The hoard in question was a payroll from the North Carolina Railroad Company, consisting of 5,145 notes and other items, with an aggregate value of \$76,679.90. These monies were to have been disbursed in early April, 1865. This proved impossible: Richmond fell on April 2, Lee surrendered a week later, and the home base of the North Carolina Railroad, Raleigh, was occupied by W. T. Sherman on April 13. Allowing a day or two for the news of Lee's surrender to filter south, plausible deposition date for the hoard would be April 12. The money was stuffed in a safe belonging to the railroad; there it lay untouched until well into this century. Sometime before 1938, the antique safe was moved into the old North Carolina State Education Building, Raleigh, and it was finally rediscovered and opened at the beginning



<sup>&</sup>lt;sup>1</sup> R. G. Doty, "The Confederate Issues of 17 February 1864," ANSMN 24 (1979), pp. 257-73.

<sup>&</sup>lt;sup>2</sup> C. E. Fuller, Confederate Currency and Stamps, 1861-1865 (Nashville, 1949), pp. 114-15.

of 1961. The hoard currently reposes in the State Museum of History, Raleigh, on permanent loan from the railroad.<sup>3</sup>

With the hoard, we have a sudden bright illumination of an area which we had previously given up for lost. The materials included tend to reinforce some suppositions, weaken or change others. Let us examine the hoard, dividing it by the categories of issuer, date, and denomination.

Date	Denomi- nation	Number of notes	Aggregate Value	Remarks
1. Con	FEDERATE	Issues		
1861	<b>\$</b> 2.00	9	\$ 18.00	
1862	1.00	73	73.00	
	2.00	351	702.00	
1863	.50	419	209.50	
	1.00	59	59.00	
	2.00	165	330.00	
	5.00	28	140.00	
1864	.50	116	58.00	Many notes in series
	1.00	34	34.00	-
	2.00	296	592.00	Many notes in series
	5.00	254	1,270.00	-
	10.00	1,093	10,930.00	
	20.00	158	3,160.00	
	50.00	2	100.00	
	100.00	4	400.00	
	500.00	1	500.00	

<sup>3</sup> Conversations with Keith D. Strawn and Neil Fulghum, North Carolina Museum of History, Raleigh, February 22–26, 1982. Mr. Strawn is Curator of Collections at the Museum, Mr. Fulghum that of Research and Development. They were instrumental in the formulation of this paper and a previous one—indeed, Mr. Strawn first called the hoard to my attention. Illustrations on Plate 35 are courtesy of the North Carolina Museum of History. Raleigh.



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Date	Denomi- nation	Number of notes	Aggregate Value	Remarks
2. STAT	re Issues			
A. Nor	th Carolina			
1861	.10	380	\$ 38.00	In cut sheets
	.25	<b>75</b>	18.75	In uncut sheets
	.50	86	43.00	In uncut sheets
	1.00	218	218.00	
	2.00	69	138.00	
1862	.10	97	9.70	
	.25	369	92.25	
	.50	63	31.50	
	1.00	31	31.00	
	5.00	9	45.00	
	10.00	1	10.00	
	20.00	2	40.00	
1863	.05	30	1.50	
	.10	3	.30	
	.25	64	16.00	
	.50	35	17.50	
	.75	14	10.50	
	1.00	38	38.00	
	2.00	<b>2</b> 6	52.00	
	3.00	6	18.00	
	5.00	6	30.00	
1864	.25	14	3.50	
	.50	38	19.00	
B. Virg	inia			
1) Virg	inia Treasu	ry Notes		
1861	\$ 5.00	2	\$ 10.00	
1862	1.00	102	102.00	
	5.00	16	80.00	
	10.00	1	10.00	
	50.00	1	50.00	

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Date	Denoi nation		Number of notes		ggregate Value	Remarks
2) Ci	v of	Richmo	and			
1862	•	.25	1	\$	.25	
1002	Ψ	.75	1	Ψ	.25 .75	
		.70	•		.70	
3) Co	rporat	ion of	Danville			
1861	\$	.75	1	\$	.75	
1862		.25	1		.25	
		.50	2		1.00	
C A1	abama					
G. AI	availla					
1863	\$	.10	1	\$	.10	
1000	₩	.25	3	•	.75	
		.50	3		1.50	
		.00	· ·		1.00	
D Sc	outh C	arolina				
<b>D.</b> 50	Julii C	ai Viiiia				
1) Cit	ty of (	Charles	ton			
1862	_	.50	1	\$	.50	
		3.00	1	r	3.00	
E. G	eorgia					
1863	\$	.50	8	\$	4.00	
F. Lo	ouisian	a				
1863	\$	5.00	1	\$	5.00	Crisp uncirculated
G M	ississip	ni				
U. M	1001001	'P'				
1862	\$	20.00	1	\$	20.00	



Date	Denomi-	Number	Aggregate	Remarks
	nation	of notes	Value	

### 3. PRIVATE BANKS, ETC.

#### A. North Carolina

1) 6	Greensboro	Mutual	Life	Insurance	Trust	Company
1861	<b>\$</b>	.25	1	\$	.25	
1862	2 \$	.25	5		1.25	
		.50	2		1.00	
1863	3	.50	1		.50	
Unc	. Date	.50	3		1.50	

#### B. South Carolina

1) Bank of the State of South Carolina

1861 \$	.25	5	\$ 1.25
	.50	1	.50
1862	.15	1	.15
	.25	3	.75
	.50	11	5.50
1863	.15	1	.15
	.25	2	.50
	.50	15	7.50
	.75	8	6.00

# C. Georgia

1) Augusta Savings Bank

1861	\$	.25	5	e	1.25
1001	Ф	.23	5	\$	1.25
		.50	4		2.00
		.75	1		.75
		2.00	1		2.00
		3.00	1		3.00

2) Union Bank, Augusta

1862 \$ .50 1 \$ .50



Date	Denomi nation		Number of coins		Aggregate Value	Remarks			
3) Bank of the State of Georgia, Savannah									
1862	\$	.50	1	\$	.50				
4) Ba	nk of A	ugusta							
1863	\$	.50	1	\$	.50				
5) Ma	acon Sav	ings B	ank						
1863	\$	.25	1	\$	.25				
6) Me	echanics	Saving	s & Loan	Ass	ociation, Sav	annah			
1864	\$	.50	1	\$	.50				

#### 4. Confederate Bonds and Coupons

#### A. Bonds

Act of 2/17/64

\$	500.00	1	\$	500.00
	1,000.00	12	1	2,000.00
	5,000.00	6	3	0,000.00
	10,000.00	1	1	0,000.00

# B. Bond Couponsa

Due on

1/1/65

\$ 15.00	<b>5</b> 3	\$	795.00
\$ 30.00	96		2,880.00
\$ 40.00	17		680.00
	TOTAL	\$ 7	76,679.90

<sup>\*</sup> These coupons were for interest on five hundred and one thousand dollar bonds. Interest was payable on or after January 1, 1865.



The people who found the hoard assumed that the bonds and coupons formed part of the payroll,4 and the original invoice of materials typed in 1961 lists them as such. It seems likely that these essentially financial items had acquired a monetary function under stress. This supposition is strengthened by the inclusion of cut and uncut sheets of notes in series in the hoard. One of the six sheets of North Carolina fractional currency is illustrated on plate 35, 1; it shows some evidence of handling. The long run of 1864 Confederate fifty cent notes show similar wear, while the two runs of two dollar bills in the hoard (81857-81872; 81876-81897) manifest still more. We can thus ascribe a second monetary practice to the Confederacy at the end of its career: not only were bonds and bond coupons being used as money; inflation had so eroded the value of that money that small- and middle-value notes might be traded in batches, thereby acquiring a greater utility. One is reminded of Russia during the Civil War of 1917–20, another society in stress, where identical monetary practices prevailed.

On the evidence of the North Carolina Railroad hoard, what answer can we give to the questions posed at the beginning of this article? First, the monetary circulation pattern of the Confederacy in 1865 was an extraordinarily rich one. It was not limited to currency of the central government, nor was it solely confined to paper money. Part of its variety was forced by the strain of events, when anything of stated value might see commercial employment. Part of it also reflected deeply held beliefs in the efficacy of the private, note-issuing bank, in the rights of the several states.

Second, new Confederate currency does predominate over old; the provisions of the Act of February 17, 1864, were apparently being observed. Only eighteen dollars' worth of 1861-dated Confederate money made its way into the hoard. For 1862, the figure ascends to \$775, and for 1863 it holds at \$738.50. For 1864, however, it balloons to \$17,044. Clearly, virtually all of the Confederate currency in circulation at the end of the war had been printed during its last year. One might have postulated a greater proportion of new notes than old ones, based on the simple survival rate of a fragile medium. But the



<sup>&</sup>lt;sup>4</sup> The North Carolina Confederate Centennial News Letter Commission, Vol. 2, 7 (Raleigh, July 1961), p. 1.

proportion would not have been that overwhelming: clearly, the fiscal writ of the Confederacy was still respected, even in its final phase.

To be sure, there are older issues in this hoard, but it will be noted that they fall into one of two categories: low-denomination Confederate issues, and mixed-denomination state, local, and private notes. And the explanation for the retention of bills in both categories is very simple: the Act of February 17, 1864 deliberately omitted them from the mandatory exchange for 1864-dated currency. Section 1 of that Act explicitly states that the currency to be exchanged was "all Treasury notes above the denomination of five dollars, not bearing interest." Confederate notes of five dollars and less were not included, perhaps testimony to the realization that the small bills were not the cause of the South's inflationary woes anyway. And the Act said nothing about state, municipal, and private issues: given the localist, private enterprise mentality of Southern leaders such as Davis and Memminger, one would have been surprised had these issues been curtailed by the law.

This brings us to a consideration of our third question: just how important was state, local, and private currency at this time? Compared to "national" currency, how large a place did it enjoy?

The answer appears to be that, while its role was fairly small, it nevertheless did have a certain enduring significance. Two varieties of non-Confederate currency are embraced here, and each had a somewhat different part to play. The majority of the bills falls into the fractional category, notes with a stated value of less than a dollar. This group spans the years 1861 to 1864, although the most of it dates from 1861 and 1862. They obviously filled a real gap in the Confederate monetary scheme, and they were allowed to remain in circulation.

The second group, those non-Confederate notes of a dollar or higher, have a more problematic role. The skew of issues to 1861 and 1862 is more pronounced here than in the fractional category; indeed, the only note dated later than the end of 1862, a Louisiana five dollar bill of March 10, 1863, seems never to have entered circulation, and it may have enjoyed a role similar to that of the Confederate bonds. In short, almost all of the notes in this second group are early issues. Additionally, the great majority come either from North Carolina itself or from



<sup>&</sup>lt;sup>5</sup> Cited in Fuller (above, n. 2), pp. 114-15.

neighboring Virginia, the sort of circulation pattern one would expect. And virtually all of them are of lower dollar denominations: if this hoard tells us anything, it tells us that the Richmond authorities were having difficulties in providing enough lower-value currency for the needs of their people. Is this another reason for the silence of the Act of February 17, 1864 concerning non-Confederate currency?

Perhaps the most curious feature of the non-Confederate population of the North Carolina Railroad hoard is the almost complete eclipse of the South's ante bellum fiscal mainstay, the private bank note. The majority of private notes in the hoard are fractional, and those few in dollar amounts are all for modest sums. It seems apparent that the section's private, note-emitting banking system had essentially collapsed under the exigencies of war. It would not be revived after the end of that war.

With the exception of state issues, monetary events in the South by 1865 had distinct parallels in the North. There too, federal currency had overshadowed everything else. There too, national and local authorities issued fractional currency. There too, private, note-issuing banks held an increasingly precarious position. But an examination of the fourth and final question posed earlier does expose a major difference between the South and the North. We asked whether the North Carolina hoard indicated the existence of other sorts of circulating paper. And the answer would appear to be a strong affirmative.

We are speaking of Confederate bonds and their coupons. They make up the bulk of the value of the hoard, some \$56,855 in all. The bonds range in date from August 27 to October 17, 1864, and they are all made out to Thomas Webb, who was the president of the North Carolina Railroad. When I saw them, they were neatly packed in contemporary envelopes, segregated as to denomination. I believe that, in a limited way, these bonds were intended for an exchange function; that they were, in fact, considered money at the time.

In part, I base this conclusion on the bond coupons which also formed a part of the hoard. The coupons, with an aggregate value of \$4,355, were all clipped, and all payable for interest due on the first of January 1865. They show evidence of handling, and I have concluded that they were not redeemed because they were needed for money, in this instance, to make up a payroll. I know of no case in the North where bonds and



bond coupons entered the numismatic mainstream, but there are examples elsewhere, particularly in the twentieth century.

The North Carolina Railroad hoard strengthens some of our preconceptions, weakens others. The existence of bonds and bond coupons comes as a surprise, but, one must admit, a logical surprise. A final item does fall into the category of the completely unexpected: a group of nine obviously circulated two dollar bills dated September 2, 1861 (Plate 35, 2). These notes have always been controversial. They were not authorized by Confederate statute (the Act of August 19, 1861 only permitted denominations of "not less than \$5"6), and no one knows exactly when they were printed, or precisely why. Slabaugh claims that the date came about as a simple printer's error, during the issue of June 2, 1862, which did feature duly authorized notes of this design. This explanation seems plausible enough, although the complete story is likely never to be known.

What has been known for over a century is that the 1861-dated two dollar bill is scarce, perhaps rare. Criswell assigns it a rarity number of eight on a scale of eleven,8 which would translate to a dozen or so known specimens. This figure is certainly too low: the ANS has three specimens of its own. But the note is still scarce. How did nine examples of this issue make their way, several years after their mistaken issue, into a payroll in North Carolina? Among all of the circumstances surrounding the railroad hoard, this one is perhaps the most intriguing.

<sup>&</sup>lt;sup>6</sup> Preamble, cited in Fuller (above, n. 2), p. 71.

<sup>&</sup>lt;sup>7</sup> A. Slabaugh, Confederate States of America Paper Money, rev. ed. (Chicago, 1971), p. 23.

<sup>&</sup>lt;sup>8</sup> Grover C. Criswell, Jr. Criswell's Currency Series, vol. 1: Confederate and Southern States Currency, 2nd rev. ed. (Citra, Florida, 1976), p. 33.

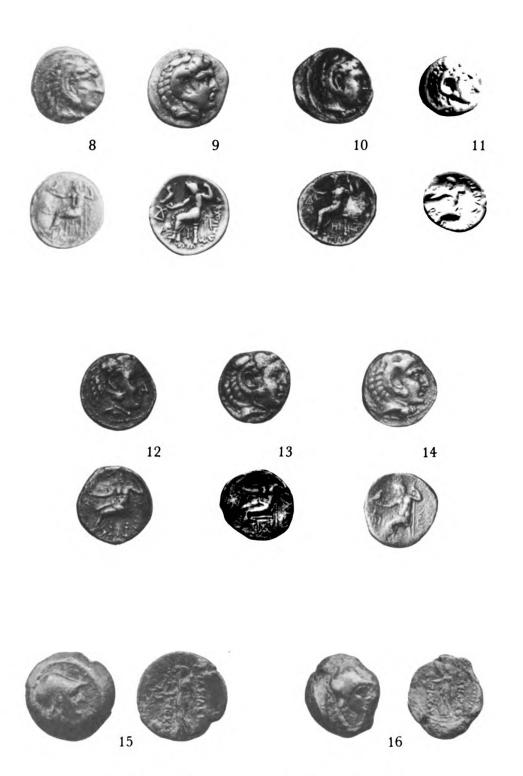
# **PLATES**





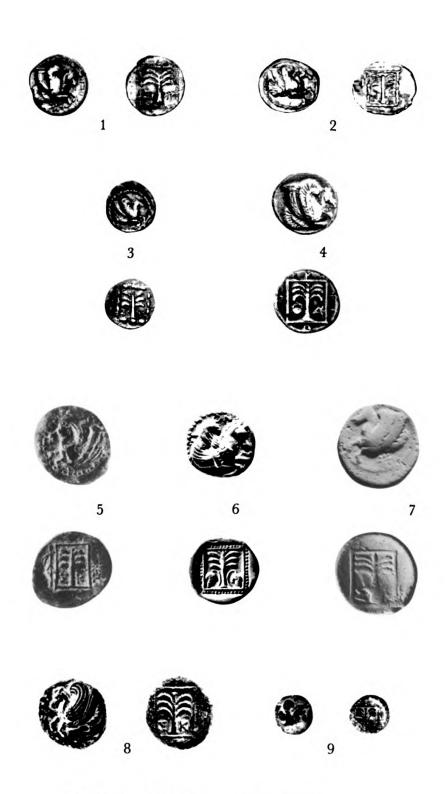
Early Far Northeastern Seleucid Mints





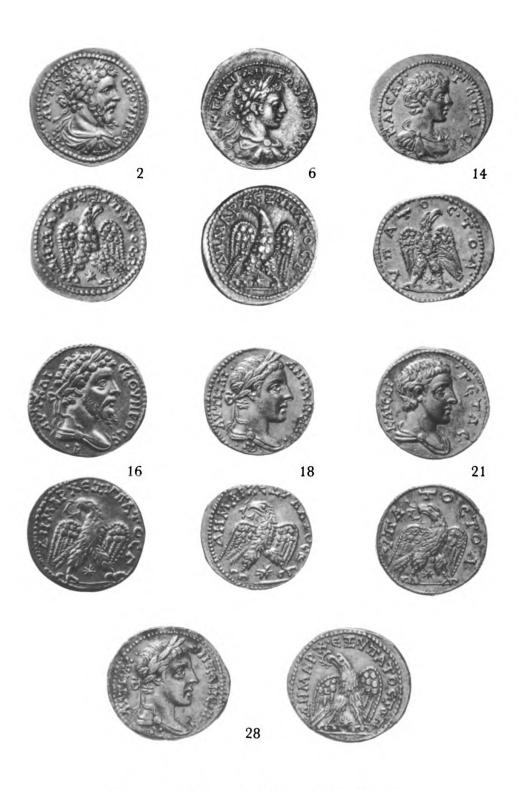
Early Far Northeastern Seleucid Mints





Hellenistic Coinage of Scepsis





Severan Tetradrachms of Laodicea





Severan Tetradrachms of Laodicea





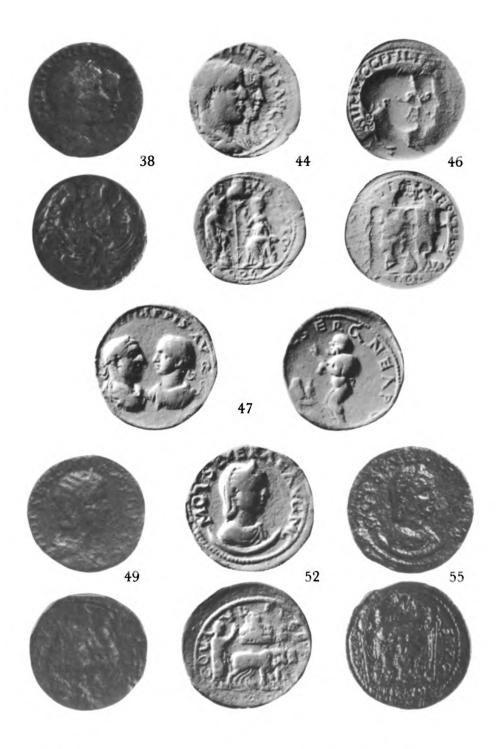
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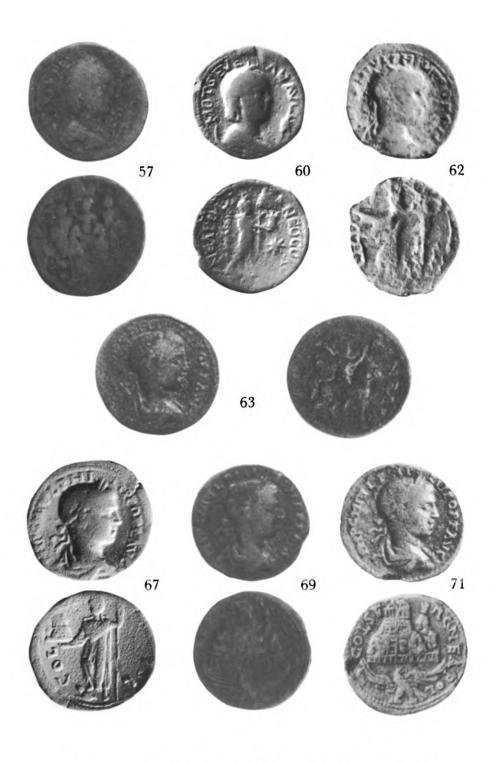
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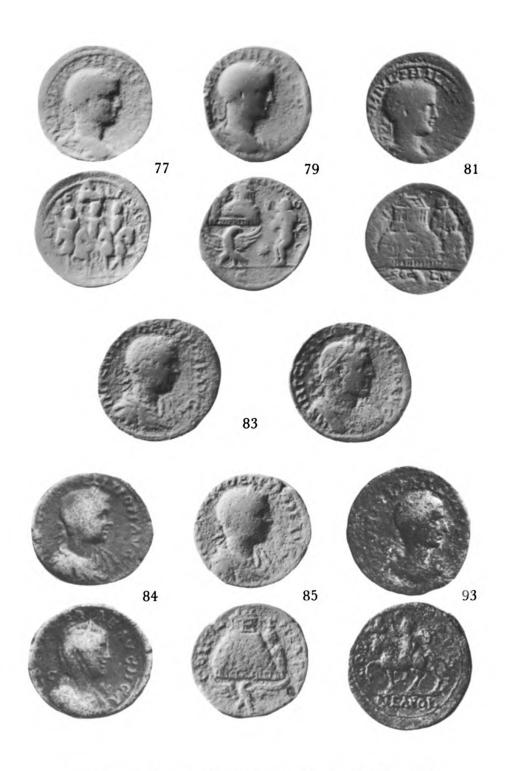
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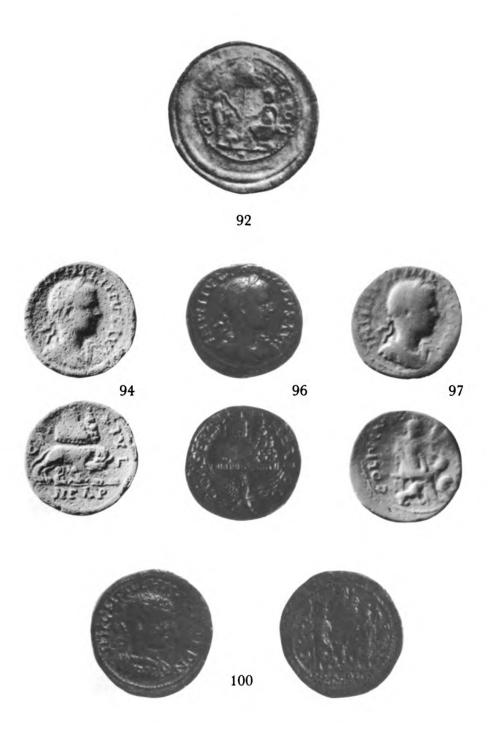
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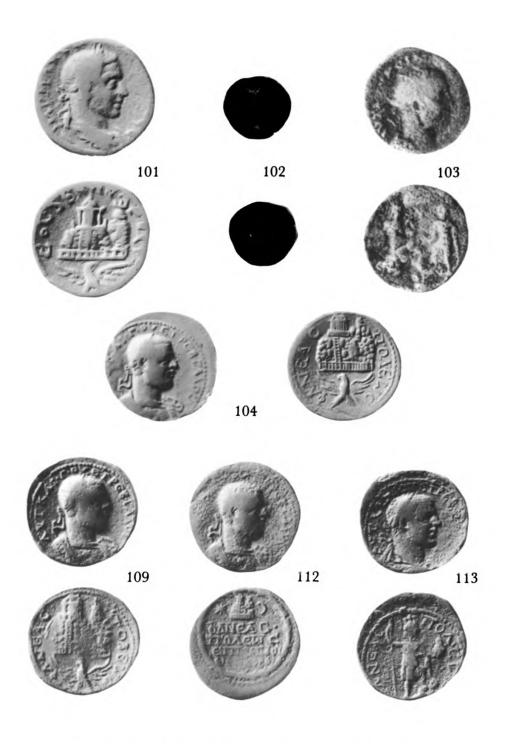
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Coinage of Neapolis in Samaria, A.D. 244-53





Coinage of Neapolis in Samaria, A.D. 244-53





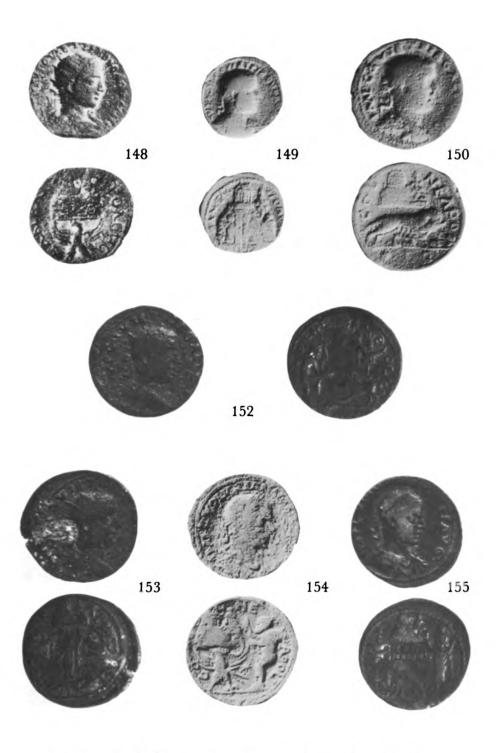
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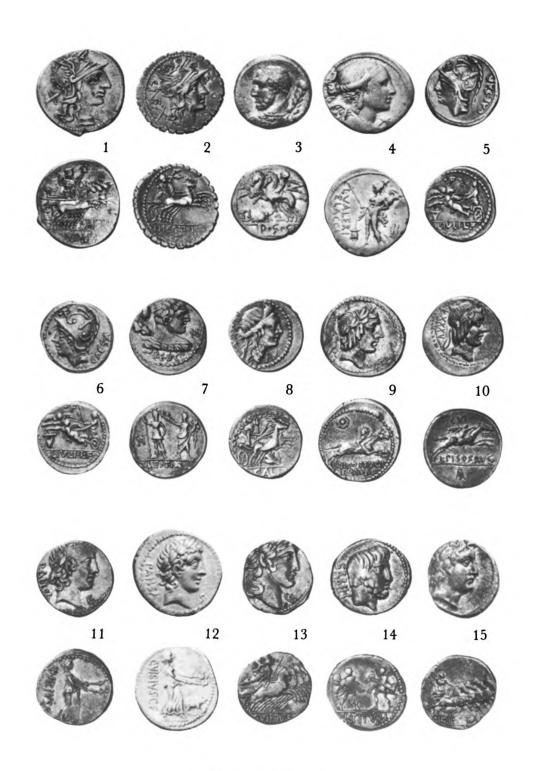
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Coinage of Neapolis in Samaria, A.D. 244-53





Mesagne Hoard





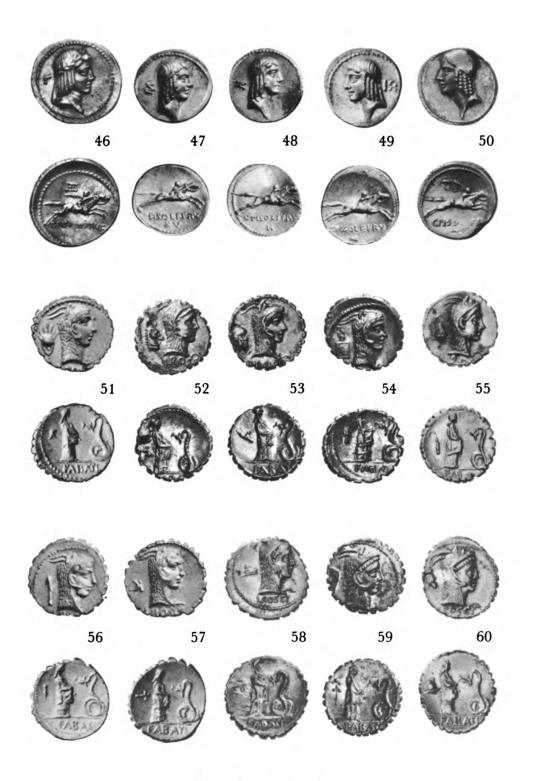
Mesagne Hoard





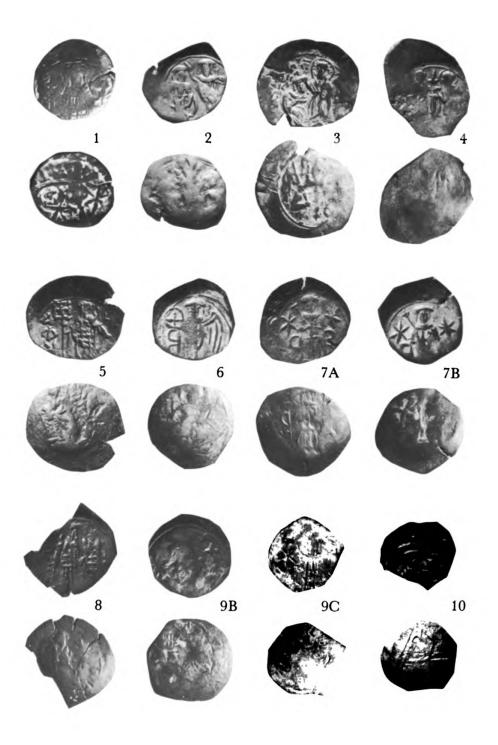
Mesagne Hoard





Mesagne Hoard





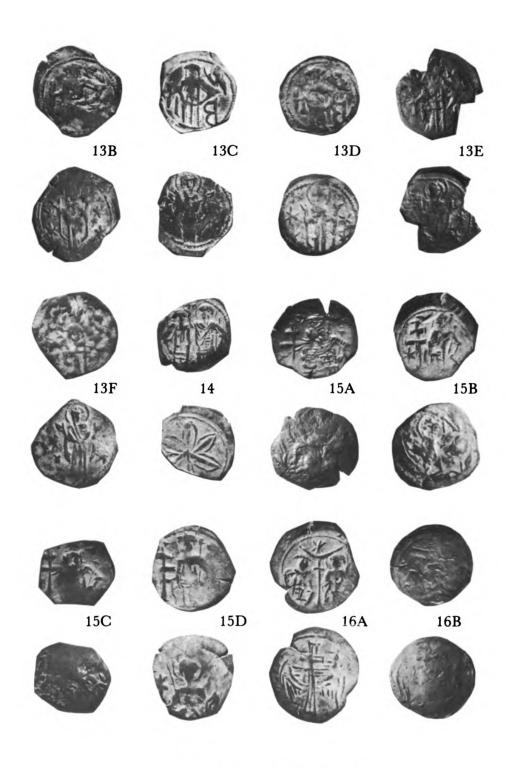
Longuet's Salonica Hoard





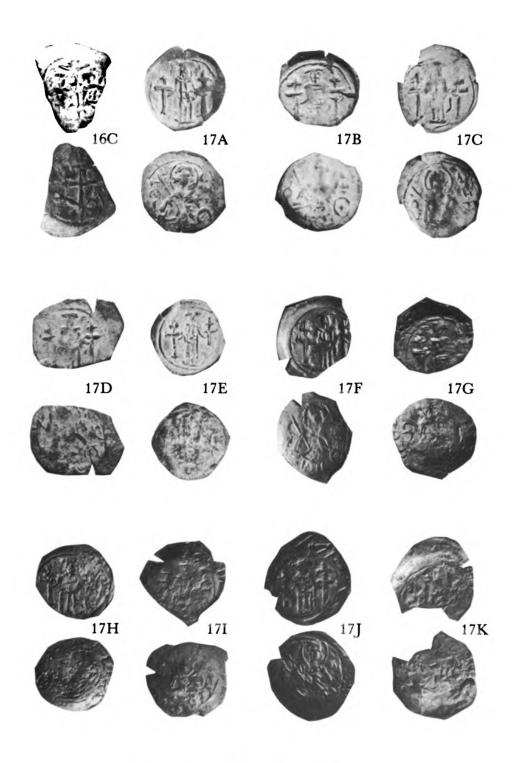
Longuet's Salonica Hoard





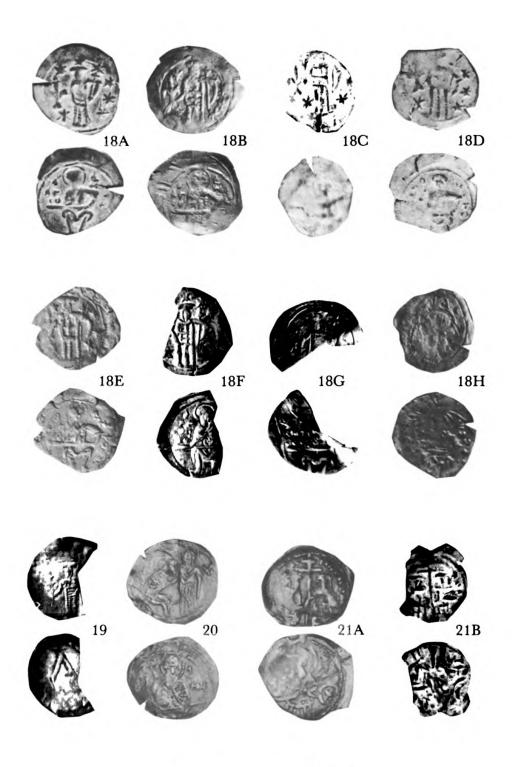
Longuet's Salonica Hoard





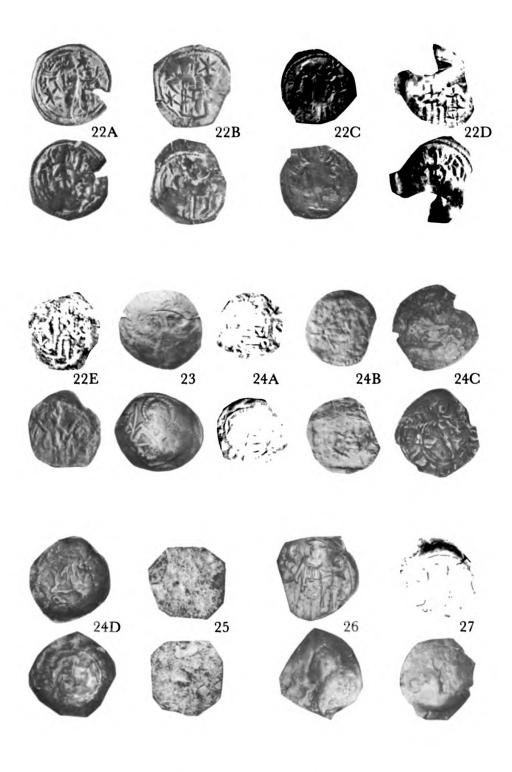
Longuet's Salonica Hoard





Longuet's Salonica Hoard





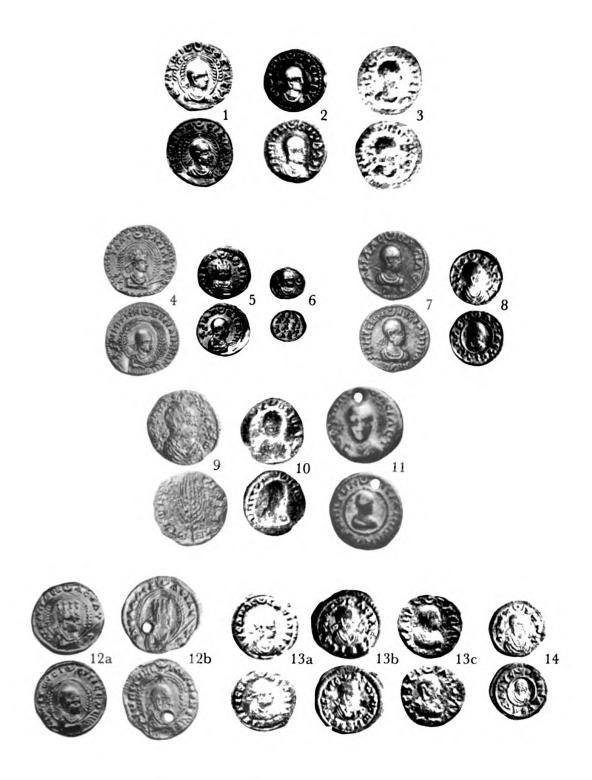
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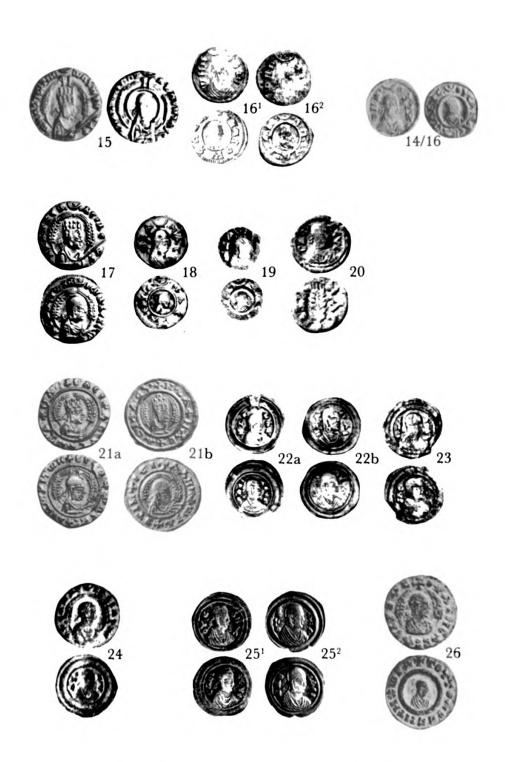
Longuet's Salonica Hoard





Coinage of Axumite Royal Line

Endybis (1-3), Aphilas (4-11) and Ousanas I (12-14)



#### Coinage of Axumite Royal Line

Wazebas I (15-14/16), Ezanas (17-23), Ousanas II (24-25) and Wazebas II (26)



Coinage of Axumite Royal Line



Coinage of Axumite Royal Line

Coinage of Axumite Royal Line

Iathlia (48), Gersem (49-53), Joel (54-61) and Hataza (62-66)

Original from UNIVERSITY OF MICHIGAN



#### Coinage of Axumite Royal Line

Wazenaz (67-70), Armaha (71-72) and Modern Forgeries (a-n)



Florentine Restrike Taler



### Plate 34



Florentine Restrike Taler

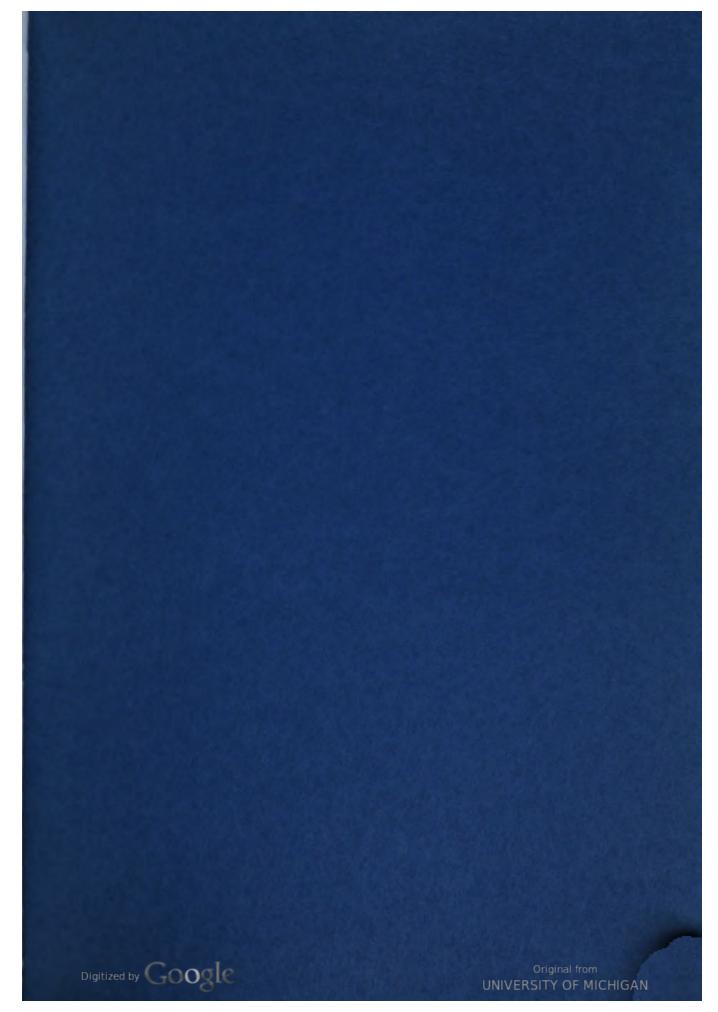






### North Carolina Railroad Hoard





THE AMERICAN NUMISMATIC SOCIETY

### MUSEUM NOTES

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(PLATES 1-22)

KENNETH S. SACKS

### HISTORICAL INTRODUCTION

Myrina,<sup>1</sup> a small polis on the coast of Aeolian Asia Minor, yields a sparse ancient record. To modern investigators, it is known mostly for

<sup>1</sup> For the various forms of the name, *RE Suppl.* 6, s.v. "Myrina," cols. 615-16 (Ruge); hereafter cited *RE Suppl.* 6.

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its fine terracottas and tetradrachms, both of the second century B.C.<sup>2</sup> To ancients, however, its main claims to fame were its proximity to the Apollonian temple at Gryneium and its tasty oysters.<sup>3</sup> Unfortunately, when today we attempt to pry open Myrina's historical past, we find grains of sand but few pearls of insight.<sup>4</sup>

Myrina was among a group of 11 towns of southern Aeolis,<sup>5</sup> the most important by far being Cyme. Only 47 stades, or less than nine kms from Myrina,<sup>6</sup> Cyme's economic power seems initially to have rendered Myrina of secondary importance within their group of Aeolian poleis.<sup>7</sup> The Athenian tribute lists of the mid-fifth century B.C. give a picture of the relative wealth of some of the cities. Cyme's annual contribution during the "normal" years, 454-425, was 12 talents; Myrina, identified on the tribute lists as  $M\acute{v}\varrho\iota\nu\alpha$   $\pi\alpha\varrho\grave{\alpha}$   $K\acute{v}\mu\eta\nu$  to distinguish her from the probably more important homonymous city on Lemnos, paid but one talent. Most other cities of the group paid about one-half or one-third of a talent.<sup>8</sup>

Though dwarfed by Cyme in classical times, Myrina nevertheless made its mark later. The brilliant and highly desirable terracottas of the late



<sup>&</sup>lt;sup>2</sup> On the terracottas, see especially E. Pottier and S. Reinach, La Nécropole Myrina (Paris, 1887); hereafter cited as Pottier-Reinach.

<sup>&</sup>lt;sup>3</sup> Pliny, HN, 22, 21.59.

<sup>4 &</sup>quot;Myrina is a city without a history," so G. E. Bean, Aegean Turkey: An Archaeological Guide (London, 1966), p. 106; hereafter cited as Bean. For a modern description, see pp. 106-10, C. Schuchhardt in A. Conze et al. Altertumer von Pergamon (Berlin, 1912), vol. 1, pt. 1, pp. 96-98.

<sup>&</sup>lt;sup>5</sup> Hdt. 1, 149. The others are Aegae, Aegirusa, Cilla, Cyme, Gryneium, Larissa, Neonteichos, Notium, Pitana, and Temnos. Smyrna had been the twelfth member but became Ionian by the eighth century: Hdt. 1, 149; W. W. How and J. Wells, A Commentary on Herodotus, vol. 1 (Oxford, 1912), p. 124; E. V. Hansen, The Attatids of Pergamon (Cornell, 1971), p. 5, n. 12, hereafter cited as Hansen. The best discussion is in Schuchhardt (above, n. 4), pp. 93–95.

<sup>&</sup>lt;sup>6</sup> On the distance, Strab. 13, 662, with Pottier-Reinach, pp. 19-41, correcting Strabo slightly.

<sup>&</sup>lt;sup>7</sup> Pottier-Reinach, p. 47. On Cyme, see J. H. Oakley, "The Autonomous Wreathed Tetradrachms of Kyme, Acolis," ANSMN 27 (1982), p. 2, n. 4; hereafter cited as Oakley.

<sup>&</sup>lt;sup>8</sup> RE Supp. 6, col. 622. A complete list of Myrina's entries in the tribute lists is in B. D. Merrit et al., *The Athenian Tribute Lists*, vol. 1 (Cambridge, Mass., 1939), pp. 348-49.

hellenistic period reflect the influence of diverse and important schools of art. Moreover, the necropolis at Myrina reveals that during the same period this city seems to have been in the forefront of glassmaking. The amphoras from Cnidus, Thasos and Rhodes attest its extensive trade with the Greek world; indeed, it was admired for its excellent harbor. Perhaps most importantly, its prominence as a town of craftsmen was aided by its proximity to Gryneium.

Lying 40 stades north of Myrina, Gryneium possessed a magnificent temple to Apollo (νεώς πολυτελής),<sup>11</sup> as well as an ancient oracle.<sup>12</sup> Though Apollo was an especially prominent deity throughout all of Asia Minor (undoubtedly because of his eastern origins),<sup>13</sup> the particular importance of the shrine at Gryneium is indisputable. It is, in fact, altogether probable that Gryneium was the central sanctuary of the Southern Aeolian League.<sup>14</sup> It is all the more significant, then, that, both in 399 B.C.<sup>15</sup> and again by Strabo's day in the first century B.C.,<sup>16</sup> Gryneium was under the control of Myrina. Since Myrinean coinage under Septimius Severus carries the picture of the Temple to Apollo, the relationship must have continued into late Imperial times.<sup>17</sup> Further,



<sup>&</sup>lt;sup>9</sup> Terracotta styles: Pottier-Reinach, pp. 156-72; glassmaking: pp. 211-14; and trade: pp. 223-27.

<sup>&</sup>lt;sup>10</sup> [Scylax] 36; B. G. Niebuhr, "Agathias," Corpus Scriptores Historiae Byzantinae (Bonn, 1828), p. ix; compare Strab. 13, 3.5.

<sup>&</sup>lt;sup>11</sup> Strab. 13, 3.5.

<sup>&</sup>lt;sup>12</sup> L. R. Farnell, *The Cults of the Greek States* (Oxford, 1907), vol. 4, chapter 4; others attested at Aegae (p. 380, n. 107) and Magnesia-on-Macander (p. 403, n. 198). Only one actual oracle from the Gryneian Apollo is known: see Bean, pp. 110-12.

<sup>13</sup> Farnell (above, n. 12), pp. 224 and 403, n. 197.

<sup>&</sup>lt;sup>14</sup> OCD, s.v. "Aeolis." It was a main repository even for treaties involving non-Aeolian states; W. Dittenberger, *Orientis Graeci Inscriptiones Selectae* (Leipzig, 1903), vol. 1, nos. 229, 87, and 226, 19.

<sup>15</sup> Xen., Hell. 3, 1.6

<sup>&</sup>lt;sup>16</sup> See below, n. 17. Though Gryneium was treated brutally by Parmenion in 335 (Diod. Sic. 17, 7.9), it clearly regained its prominence afterward.

<sup>&</sup>lt;sup>17</sup> Strab. 13, 3.5; Pottier-Reinach, pp. 19 ff. Indeed, it appears that by the first century A.D., Apollo had replaced the Amazon Myrina as Myrina's patron deity: see Bean, p. 107, with references in *RE Supp.* 6, col. 617. Of course, by then Myrineans would have wished to take advantage of the good will produced by Virgil's claim that Gryneian Apollo had urged Aeneas to go to Rome (Bean, pp. 110-12). Note also *BMCTroas*, p. 139, 44. Stephen of Byzantium (s.v. "Aegae") claims that Aegae too was under Myrinean control, but this is unlikely (and, in any case, undatable; see

it is also likely that Myrina's control of the shrine was maintained during the hellenistic period as well. The Myrinean coins now under examination display an Apolline theme, with the head of the deity on the obverse and a picture of the standing Apollo on the reverse. During the midsecond century B.C.—a period when silver coinage was produced by even some of the most insignificant states—Gryneium is not known to have minted any such coinage itself.<sup>18</sup> The iconography of the second century Myrinean issues, therefore, indicates its control over the nearby sanctuary during this period as well.

Such a relationship would naturally be profitable for Myrina. Those travelling to the sanctuary might, for example, put in for the night at Myrina (though the town closed early, as Aelius Aristides was to discover). The terracottas and glassware undoubtedly tempted many such visitors and provided further encouragement to Myrinean craftsmen. One need only remember the commercial implications of the First Sacred War fought over the sanctuary of Apollo at Delphi, or the profits which came to Elis from the Olympic Games, to understand that Myrina must have benefitted greatly from proximity to, and political control over, Gryneium. Thus, from what little evidence is available, Myrina appears to have been a thriving commercial town with a successful tourist trade. This reconstruction will prove important in explaining the extraordinary size of its second century coinage.

RE Supp. 6, col. 620). For the Aegean boundary stone, see now P. Hermann, Neue Inschriften zur hist. Landeskunde von Lydien und angrenzenden Gebeile (Vienna, 1959), pp. 4-6. A picture of the temple in the time of Septimius Serverus can be found on the coin in BMCTroas, pl. 28, 7.

- <sup>18</sup> L. Robert, "Sur des inscriptions de Délos," *BCH Suppl.* 1 (1973), p. 482, n. 13, for recent bibliography of its third century coinage (its only coinage).
- 19 It had been given the right to grant asylum, as well as to act as a seer: Pottier-Reinach, p. 54, n. 2.
- <sup>20</sup> Hieroi Logoi, p. 534 (Dindorf); see the delightful account of W. M. Ramsay, "Contributions to the History of Southern Aeolis," JHS 2 (1881), pp. 44-54.
- 21 In this period, Cymean terracottas were generally quite inferior both in quality and quantity to the Myrinean. In fact, many of the better specimens found in Cyme were obviously of Myrinean origin or influence; see M. Dufková, "Hellenistic Production of Terracottas in Asia Minor Kyme," in P. Olivia and J. Burian, eds., Soziale Probleme im Hellenismus und im Römischen Reich (Prague, 1973), pp. 277–94. For a comparison of Myrinean terracottas with Prienean and Pergamene, see E. Töpperwein-Hoffman, "Terracötten von Priene," Deutsches Archaelogischen In-



Though Myrina may have had control of Gryneium, it was not always invulnerable itself to foreign influence. The third century saw in Asia Minor the receding presence of the Seleucid kingdom and the concomitant rise of Pergamum. It is important for present purposes to establish Myrina's relationship to these two powers, for the Myrinean wreathed tetradrachms and the wreathed coinages of all the smaller cities of Western Anatolia have frequently been interpreted within these larger political considerations. Myrina's earlier, third-century coinage helps tell the story. In the 260s, Myrina minted tetradrachms with the head of Antiochus I, and later with Antiochus II (?), on the obverse.<sup>22</sup> The reverse bore an image of Heracles, with the legend "Antiochus the King," and the town symbol of the amphora. A common mint mark of phi-omega shared by the Seleucid types of Myrina, Cyme, and Phocaea (an Ionian city) led MacDonald to argue that the coins were minted at or under Phocaea (hence the phi-omega) and that the three cities belonged to some sort of league. MacDonald held that the minting of Seleucid type coins was a voluntary act, aimed at attracting the sympathy of one foreign power in an effort to offset a possible threat from another, namely Pergamum.<sup>23</sup> That Myrina maintained its independence during this period is further suggested by the fact that it was simultaneously minting a silver coin of under two grams with Athena (obverse) and Artemis (reverse), which was clearly an autonomous issue.24

stitut (Istanbul) 21 (1971), pp. 125-60. For the political history of Myrina during the classical period and beyond, see G. Fogazza, "Sui Gongilidi de Eretria," La parola del passato 27 (1972), pp. 129-30, and RE Supp. 6, cols. 619-21. What can be uncovered from the ancient evidence in no way bears upon the understanding of the wreathed tetradrachms.

- <sup>22</sup> E. T. Newell, WSM, pp. 314-16.
- $^{23}$  G. MacDonald, "Early Seleucids Portrait II," JHS 27 (1907), pp. 145-60. He suggests specifically that the coins were struck to celebrate Antiochus I's victory over the Gauls. Newell, WSM, pp. 306-13, hesitantly accepts some sort of union between the three states, but does not believe them to be independent; rather, they produced these coins by order of the Seleucid mint.
- Philip Kinns, however, has suggested privately that the Myrinean hemidrachms are a fourth century coinage and are to be connected with those of Phocaea (e.g., Naville 4, Apr. 1921 [Pozzi], 2511), see B. V. Head, HN, p. 555. It is also worth noting that a coin minted under Nerva bears the inscription  $\delta\mu\delta\nu$  at  $\pi \phi\delta(\varsigma)$   $K\nu\mu\dot{\epsilon}o\nu\varsigma$  at  $M\nu\varrho\nu\dot{\epsilon}o\nu\varsigma$ ; see F. Imhoof-Blumer, Kleinasiatische Münzen (Vienna, 1902), vol. 2, p. 510; compare RE Supp. 6, col. 618.



Now, the Seleucid type issues are traditionally dated to the last years of Antiochus I (d. 261), perhaps extending into the early reign of Antiochus II. MacDonald, Newell, and others argue that, after the rise of Eumenes I of Pergamum, these cities—and Myrina especially—fell under Pergamene influence, and that because of this the minting of the Seleucid types ceased.<sup>25</sup> But the cessation of Seleucid types does not prove that Myrina came under the control of Pergamum. Along with many of its neighbors in Anatolia and the Ionian islands, Myrina soon afterward began producing an autonomous late posthumous Alexander tetradrachm coinage. Myrinean specimens are found in a hoard from Asia Minor of ca. 210 B.C.,<sup>26</sup> though some nearby states had been minting similarly styled coins since 270.27 These coins leave little doubt that Myrina continued to be independent during the latter part of the third century28 and that the cessation of the Seleucid types (and the subsequent adoption of the posthumous Alexanders) was due to a stylistic decision consistent with that of its neighbors.29



<sup>&</sup>lt;sup>25</sup> MacDonald (above, n. 22) and WSM, pp. 315-16 and, especially, E. Meyer, Die Grenzen der hellenistischen Staaten in Kleinasien (Zurich, 1925), pp. 95-99.

 $<sup>^{26}</sup>$  R. Bauslaugh, "The Posthumous Alexander Coinage of Chios," ANSMN 24 (1979), pp. 1-45; hereafter cited as Bauslaugh.

<sup>&</sup>lt;sup>27</sup> Bauslaugh, p. 11.

<sup>28</sup> As Bauslaugh, p. 21, argues for Chios.

<sup>29</sup> Myrinean bronze coins, dated to the second century B.C. and bearing a griffinadorned Athena (BMCTroas, pl. 27, 7), so closely resemble the Pergamene type that Ramsay ([above n. 20], p. 281; compare Hansen, p. 221) takes it as proof of Pergamene control. Several points can be made here. First, these Myrinean coins have as well been dated to the fourth century B.C.: HN, p. 555. Even so it is true that a griffin on Athena's helmet is quite rare, but it does, in fact, occur also on coins of fourth century B.C. Clazomenae (BMCIonia, pl. 6, 10) and, more significantly, on those of fifth and fourth century Phocaea (pl. 5, 2): we should recall the special relationship between Myrina and Phocaea. Moreover, the Gongylides of Myrina were likely responsible for establishing Pergamene social institutions, mythologies, and even coinage (Robert [above, n. 18], pp. 483-84, n. 20, on Xen., An. 7, 8.8.8). Thus, if later there is a temporary confluence of iconography, it may have its roots in the earlier Myrinean influence on Pargamum. Lastly, it would be unusual for Pergamum to grant Myrina the independence to mint her own silver, but insist on specific styles in the minting of bronze. See also R. E. Allen, The Attalia Kingdom: A Constitutional History (Oxford, 1983), pp. 17-26, for other arguments supporting Myrina's freedom from Pergamene control.

Other evidence points to a similar conclusion. Polybius, in discussing Attalus I's successful attempt in 218 to counter the aggressions of Achaeus of Syria, mentions Myrina together with Cyme and Phocaea. Polybius records that, with Achaeus occupied elsewhere, Attalus visited the Aeolian area and appealed to these three states; they then went over to his side willingly.<sup>30</sup> Their voluntary action suggests that they were at the time free to make such a choice.<sup>31</sup> Moreover, it should be noted that the three states involved here are the same three which nearly a half-century earlier seemed to have formed a political league. This indicates a certain political independence from Pergamum.<sup>32</sup>

Seleucid influence in Western Asia Minor was eclipsed for the final time by the Peace of Apamea, in 188. But, as Pergamum moved into the vacuum, its power did not become obtrusive to many of the cities along the coast. It is not known for certain whether Myrina was obliged by the Treaty of Apamea to pay tribute to Pergamum. Even if it was, however, it seems unlikely that Pergamum ever pressed that obligation,<sup>33</sup> and any possible Pergamene rule must have been especially lenient.<sup>34</sup> Indeed, what will be seen in the present study is that Myrina's wreathed coinage—minted only a generation after the Peace of Apamea—fits



<sup>&</sup>lt;sup>30</sup> Polyb. 5, 77. 3–5. The emendation from Smyrna to Myrina is virtually certain (see *RE Supp.* 6, col. 617) and now commonly accepted; e.g., F. W. Walbank, *A Historical Commentary on Polybius*, vols. 1–3 (Oxford. 1957–1979), vol .1, p. 603, hereafter cited as Walbank.

<sup>&</sup>lt;sup>31</sup> Walbank 1, p. 604; D. Magie, Roman Rule in Asia Minor to the End of the Third Century after Christ (Princeton, 1950), 2, pp. 939-41. See also the objections by scholars cited in Walbank 2, p. 644; objections which do not appear to address effectively the status of Myrina.

 $<sup>^{32}</sup>$  Just south of Myrina, before Cyme, there is carved on a rock the words,  $\tilde{o}_{QOI}$   $\Pi_{EQYa\mu\eta\nu\tilde{o}\nu}$ . In the past, this boundary stone has been taken to indicate Pergamene dominion over Myrina during this period: RE Supp. 6, col. 616; Schuchhardt (above, n. 4), pp. 95-96; WSM, p. 306; Hansen, p. 23. Recently, however, L. Robert has argued that the design of the inscription is inappropriate to hellenistic times, and suggests instead an imperial date (above, n. 18), pp. 481-82, n. 12.

<sup>33</sup> H. Seyrig, "Monnaies hellénistiques," RN 1963, pp. 20-21; Hansen, p. 44; and especially Walbank 3, pp. 167-69. For evidence of contacts between Pergamum and Gryneium, add to Walbank: Robert (above, n. 18), pp. 478-85.

<sup>&</sup>lt;sup>34</sup> Hansen, pp. 168-69. C. Boehringer, Zur Chronologie der mittelhellenistischer Münzserien 220-160 v. Chr., AMUGS 5 (Berlin, 1972), pp. 17-19 (hereafter cited as Boehringer, Zur Chronologie) argues that Myrina's posthumous Alexandrian coinage suggests that it had already been granted autonomy by the Seleucids.

within the context of the wreathed coins produced by other states of coastal Anatolia and the Aegean, most of which were demonstrably independent of foreign control. The contemporary Pergamene coinage was on the cistophoric standard, and Pergamum imposed this as a closed system within its empire. Yet, there is no evidence at all of cistophoroi used in or around Myrina. This, too, speaks strongly for the autonomy of second century Myrina. The strong produced by other states of coastal Anatolia and the Aegean, most of which were demonstrably independent of second second century Myrina. The strong produced by other states of coastal Anatolia and the Aegean, most of which were demonstrably independent of foreign control. The contemporary Pergamene coinage was on the cistophoric standard, and Pergamum imposed this as a closed system within its empire. Yet, there is no evidence at all of cistophoroi used in or around Myrina. This, too, speaks strongly for the autonomy of second century Myrina.

### THE WREATHED TETRADRACHMS: STYLE AND ORDER OF EMISSION

By far the most significant coinage produced by Myrina, and that now under investigation, is the wreathed tetradrachms of the mid-second century B.C.<sup>37</sup> Based on the reduced Attic standard, these coins are quite similar in style to numerous other contemporary coinages, <sup>38</sup> an historical phenomenon which will be discussed later in this paper. For now it is necessary to study the character of the particular Myrinean emissions.

Obv. Head of Apollo r., wearing laurel wreath with ribbons flowing behind; hair braided, falling about neck.

- <sup>35</sup> N. F. Jones, "The Autonomous Wreathed Tetradrachms of Magnesia-on-Maeander," ANSMN 24 (1979), p. 92; hereafter cited as Jones; O. Morkholm, "Some Reflections on the Production and Use of Coinage in Ancient Greece," Historia 31 (1982), pp. 300–301. A rare cistophorus (only two are known to exist) is on the Attic standard: see R. A. Bauslaugh, "The Unique Portrait Tetradrachm of Eumenes II," ANSMN 27 (1982), pp. 39–51.
- <sup>36</sup> Seyrig, (above, n. 33), p. 20, n. 3; compare Allen (above, n. 29), pp. 110–12. The only other possible curtailment of Myrinean freedom in the pre-Imperial times was Philip V's occupation of Myrina from 202–196 (Polyb. 18, 44. 10). Since Myrina is mentioned between Thasos and Perinthus, Polybius must surely have meant Lemnian Myrina; compare Pottier-Reinach, pp. 49–50; Walbank 1, p. 603.
- <sup>37</sup> There is also a drachm, exceedingly rare (see the catalogue); a similary rare drachm is known for Cyme (Oakley, p. 3, n. 7), and only a single drachm has been identified for Magnesia (Jones, p. 64, n. 4).
- <sup>38</sup> O. Mørkholm, "Chronology and Meaning of the Wreathed Coinages of the Early 2nd Cent. B.C.," NumAntClas 9 (1980), pp. 145-58.



Rev. Apollo of Gryneium standing r., wearing laurel wreath; himation is draped around his lower torso; bare from the waist up; in r. hand, patera, in l., branch with two fillets. At feet, omphalos and amphora (city symbol). To l., downward, MYPINAIΩN and one or more monograms. All within laurel wreath.

The two distinguishing features of the coinage are the monograms on the reverse and the portrayal of Apollo on the obverse. At least 46 monograms have so far been identified. As these divide the coinage into different issues, the catalogue has been organized by the monograms/issues. A reference to a coin 18.15 refers to issue 18, obverse 15 (a lower case letter following the obverse number refers to the reverse die: see the explanation at the beginning of the catalogue). Monograms will be discussed in full later; what must be examined first is the portrayal of Apollo on the obverse.

The major stylistic variance among the coins involves the manner in which Apollo's hair is dressed. There are three basic distinct dressings. The most frequently used is one in which the hair falling on Apollo's neck is divided into three rather loose plaits, issues 18 to 41. The second style has two such plaits (or, sometimes, completely free-flowing locks),39 issues 36 to 46. The third type of hair dressing involves tightly twisted braids, two or more in number, with one of them usually falling forward toward the front of the face, numbers 1 to 18. In this last style, the hair on top of the head is also somewhat braided, as contrasted with the former two, in which it is usually layered or allowed to fall freely. Moreover, on the Apollos with tightly twisted braids the ribbons attached to the bottom of the wreath flow backward naturally, as if blown by the wind. The ribbons on (what are henceforth termed) the two- and three-braided Apollos descend and then turn dramatically upward, suspended in air with a lacquered effect. On the whole, the portraiture of the (henceforth) tightly-braided style seems far

BMCTroas, p. 135, divides the coinage solely on the basis of how tightly the braids are bound. With considerably more coins at our disposal, it is now clear that such a criterion does not apply. What are here termed two-braided Apollos may be loosely plaited or free-flowing (see monograms 42 and 45), but three-braided Apollos are always portrayed in the same manner and never have the free-flowing locks. The extremely tightly plaited Apollos (see below) may have two or three queues.



more austere. It appears certain that the Myrinean die cutters held in mind these three precise perceptions of Apollo detailed above.<sup>40</sup>

The three hair styles seem, in the most general way, to divide the Myrinean coinage into three different varieties. Indeed, while hoard evidence, discussed in detail later in this paper, appears inconsequential, a metrological study does suggest a certain order of emission based on the three varieties of hair styles on the obverse Apollos. (See Table 8.) The tightly-braided Apollos were struck on an exceptionally widespread flan, and their weights are consistently, and significantly, higher than the other two varieties. The average, in fact, is 16.70 g, quite near the theoretical ideal of the reduced Attic tetradrachm standard. Such an average is approximately the same as that for the wreathed tetradrachms of Cyme and Magnesia-on-Maeander.<sup>41</sup> The average weight of the three-braided Apollos, however, falls to 16.361 g, and that for the two-braided Apollos to 15.851 g.

Despite this decline in average weight, individual coin weights within each type may vary considerably. The range for the tightly-braided coins is between 16.95 g (43.8a) and 15.63 g (18.2a). The range widens dramatically for the three-braided coins: two that share the same pair of dies weigh 17.18 and 17.12 g (36.69n), while another coin weighs only 13.50 g (20.31i). The two-braided coins vary in weight between 16.82 g (36.64c) and 13.27 g (45.90i). These ranges suggest that, throughout its period of production, and particularly in minting the two- and three-braided varieties, the Myrinean mint was not especially adept at hitting a consistent average. Similar inconsistencies, however, should also be noted for the mints of Cyme and Magnesia. In the Cymean series, the ten extant coins of the magistrate Philodoxos average a scant 15.2995 g,42



<sup>&</sup>lt;sup>40</sup> There is a general stylistic correlation between the obverse Apollo style and the wreath on the reverse. The ribbons on the bottom of the bow are usually more loosely knotted for the two-braided Apollo than they are on the three-braided style. The reverse wreath of the tightly-braided issues is usually composed of longer leaves, surrounded by a cluster of three berries (e.g., 1.1a—more frequent for laurel), while the two- and three-braided reverses usually have a single berry and sprig growing out of the leaves (e.g., 19.17a - more usual for olive, but not unknown for laurel).

<sup>&</sup>lt;sup>41</sup> Oakley, p. 9. Jones does not present a metrology, but calculations based upon the weights recorded in his catalogue indicate that the average weights for the coins of the different magistrates (or liturgies) range from 16.48 to 16.73 g.

<sup>42</sup> Oakley, p. 7.

as compared to the overall average for the coinage which closely approaches the Attic tetradrachm standard. In the Magnesian coinage, the coins minted under Erasippos Aristeou are highly irregular: obverses 27 and 28 hover around 17 g, with 27e weighing 17.26 and the 18 coin average being a substantial 16.779 g. Yet obverse 29 of the same issue has four extant coins which average only 15.70 g.<sup>43</sup> Thus the Myrinean coinage, despite its irregularies, conforms to those of the other regional mints.

The different average weights of the three Apollo varieties are clearly indicative of an order of emission. Generally the heaviest coins are minted first and the lightest last. In the present case, this would mean that the tightly-braided were the first to be produced, followed by the threebraided and finally the two-braided. Yet a closer look at the weights of the different varieties results in a slight modification. Taken issue by issue, the weights of the tightly-braided and three-braided coins adhere closely to the overall averages for their respective varieties. For the twobraided coins, however, the average weights of individual issues fluctuate markedly. Issue 46, for which the weights of 11 coins are known, has an average of only 15.28 g; at the other extreme, the 17 coins of issue 39 with known weights average 16.594 g. The other issues fall within this wide range.44 Thus it would be inaccurate to consider all twobraided coins light and so minted late; rather certain issues of the twobraided variety (36–41) may well have been minted earlier in the production of the coinage, while others (especially issues 45 and 46) seem to have come at the very end.

Two other points further our understanding of the order of emission. On rare occasion, a particular issue or monogram may have for its obverse two different varieties of Apollos; or put the other way, two different varieties of obverse Apollos may have in common the same monogram. This monogram sharing occurs between the tightly-braided and three-braided Apollos (they share the monogram of issue 18) and between the two- and three-braided varieties (in issues 37-39 and 42-43;



<sup>43</sup> Jones, p. 107.

 $<sup>^{44}</sup>$  Issue 36 (6 coins), 16.523 g; 37 (3), 16.387; 38 (8), 16.515; 40 (2), 15.83; 41 (1), 16.56; 42 (15), 15.856; 43 (6), 15.705; 44—no weights known; 45 (15) 15.730. The few tightly-braided and three-braided Apollos within these monograms do not affect these findings significantly.

the obverses of issues 37–39 are also die linked). A slightly different relationship exists between the tightly-braided and two-braided Apollos. In this instance, there is an obverse die link between an issue whose obverses are completely tightly-braided (issue 17) and one whose obverses are, except for this single coin, two-braided.<sup>45</sup>

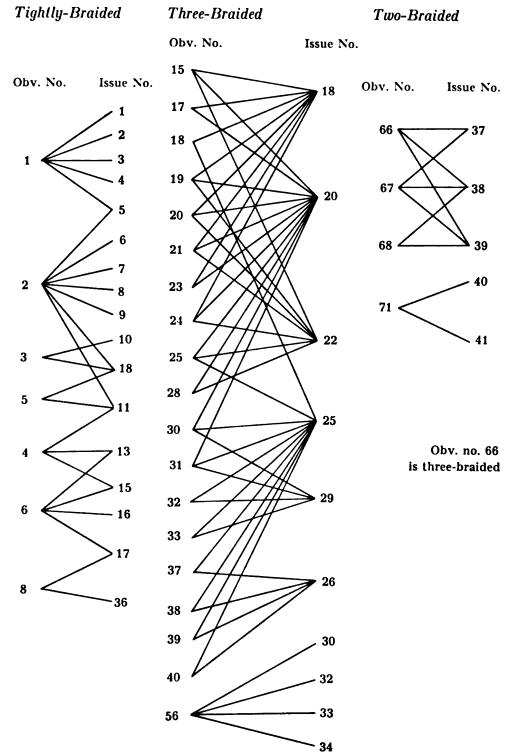
This intricate pattern of monogram sharing and die transference helps establish an order of emission for the entire coinage. That each Apollo variety shares at least one monogram or obverse with the other two varieties suggests that, at some point, all three varieties were in production at the same time. It was noted above that the tightly-braided Apollos have the highest average weight and so likely were minted earliest. It now appears probable that, as the tightly-braided coins neared the end of their run, the two other Apollo varieties were introduced, so that for a brief time all three were in production together.

A further refinement of this picture is possible. Tables 1 and 2 reflect how the various issues (as telescoped along the lines indicated by Table 5 below) share individual obverse dies. Observing the two-braided group first, the tables reveal that there was little die sharing between different issues and that, when it did occur, it was done in a reasonably orderly fashion. This suggests a methodical production, with the obverses employed serially. The same is true for the tightly-braided coins: though there was a significantly greater number of die transferences here, on the whole the production was obviously quite orderly. A complex pattern, however, occurs with the obverses of the three-braided Apollos, especially with issues 18 to 29 (conflated to fewer issues: see Table 5). The multiple die transferences must reflect the use of a die box and the period of most intense production. It is likely that these issues represent the earliest of the three-braided variety, coming just after the transition from the tightly-braided coins. At about the same time were probably produced those issues which share obverses of different Apollo varieties (see above, p. 11), as well as the heavier two-



<sup>&</sup>lt;sup>45</sup> The tightly-braided Apollo is 36.8a. It is the only tetradrachm in the catalogue with a countermark. A "tau-epsilon" is visible, as it is for the Cymean coin also in Milan; G. G. Belloni, *Musei e Gallie di Milano: Gabinetto Numismatico*, vol. 1 [Milan, 1977], no. 36); hereafter cited as Belloni, *Milano: Gabinetto Numismatico* 1. This may mean that both coins were found in Temnos. One drachm of Myrina, and perhaps a second, also has a Temnian countermark (see the catalogue).

TABLE 1
Obverse Die Sharing



# Table 2 Obverse Die Links

Because of the intricate and large number of obverse die transferences between different issues, it is impossible to indicate the linkages in the catalogue through the usual method of connecting brackets. Instead, die linkages are listed below.

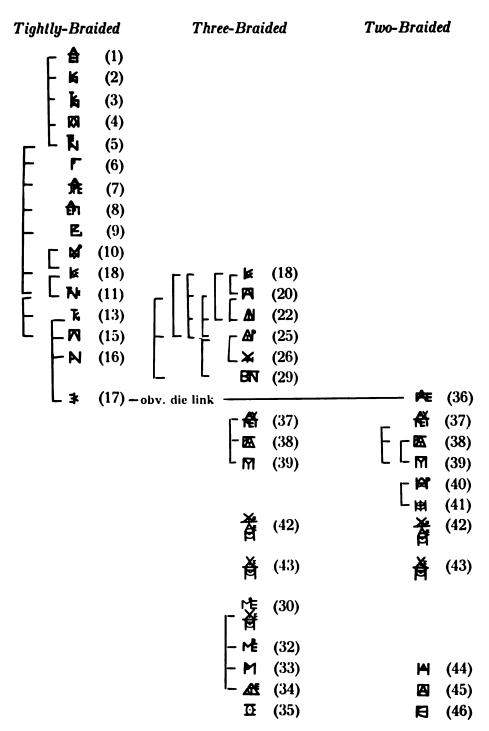
_	
Issues	Obverse Die Number(s)
1-2-3-4-5	1
5-6-7-8-9-11-18	2
10–18	3
11-12-14	4
11–18	5
13-15-16-17	6
17–36	8
18-20-22-23	15
19–20	17, 23
19–23	18
19-20-23	19, 20, 21, 24
20-21-22-23-24	25
20-22	28, 29
20-23-29	30, 31
24–29	34, 35
25-26-27	37, 38, 39, 40
26–27	41, 42, 44
30-32-33-34	56
37-38-39	66, 67
38-39	68
39–40	71

braided coins.<sup>46</sup> The last coins to be minted probably were the two-braided coins of lighter weight. These would have been produced as the coinage was winding down. The interpretation presented here is depicted on Table 3.

<sup>46</sup> Issue 36, which is mostly two-braided but also has a tightly-braided coin, and thus must be early in the production of the two-braided variety, is also of a substantial average weight: 16.523 g (for six coins of known weight). For the average weight of the other two-braided issues, see above, n. 44.



TABLE 3
Die Links



### THE MONOGRAMS

Another important feature for understanding the character of the coinage is the monogram (or ligature) in the left field of the reverse.<sup>47</sup> There are at least 46 monograms (see Table 4; three additional possibilities are included at the end of the catalogue). The present study has divided the coinage by the reverse monogram, and this division is reflected in the organization of the catalogue. Many of these monograms, however, are so close in form that they may well be different representations of the same names. In the catalogue, each monogram is considered a separate issue and so is listed individually. In Table 5, however, certain monograms, noted there, have been combined and made into the same issue.

Table 4
(Issues) / Monograms

(1)	£	(14)	A	(27)	¥	(40)	<b>P</b>
<b>(2)</b>	K	(15)	M	(28)	¥	(41)	Ħ
(3)	k	(16)	N	(29)	BN	(42)	蒼
(4)	Ø	(17)	*	(30)	内	(43)	芦
(5)	ħ	(18)	K	(31)	ME	(44)	M
(6)	F	(19)	K	(32)	ME	(45)	A
(7)	麁	(20)	A	(33)	M	(46)	Ħ
(8)	₽ı	(21)	n	(34)	<b>Æ</b>	(47)	Æ
(9)	E	(22)	M	(35)	<u>10</u> 2	(48)	ĸ
(10)	M	(23)	A	(36)	Æ	(49)	<b>Δ</b> Υ
(11)	N	(24)	A	(37)	Æ		
(12)	ħ	(25)	AP	(38)	<b>X</b>		
(13)	ĸ	(26)	×	(39)	M		

<sup>&</sup>lt;sup>47</sup> The exception is 6.2a, which has the monogram on the right. Philip Kinns has pointed out privately the reversal in the position of the ethnic and the monogram after the first few issues of the Magnesian series (Jones, p. 70) and speculates that this particular coin might be the earliest extant issue of Myrina.



### TABLE 5

### Conflation of Certain Issues

For the purposes of Table 3, certain monograms which may represent the same issue have been combined, and only one of the monograms will stand for the issue; such combinations are listed below. The reduction in the number of issues in turn reduces the number of obverse die links. For a complete list of all obverse die linkages, before this telescoping, see Table 4.

```
To (12) and To (13) as To (14) and To (15) as To (18) and Io (19) as Io (18) and Io (19) as Io (20) and Io (21) as To (23) and Io (24) and Io (25) as Io (26) and Io (27) and Io (28) as Io (28) and Io (31) and Io (32) as Io (32) as Io (33) and Io (34) as Io (35) as Io (35) and Io (36) as Io (36) and Io (36) as Io (36) as Io (36) and Io (36) as Io (36
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The following are left independent, but the closeness of their design should be noted:

```
    ♠ (7) and ♠ (8) and ♠ (36)
    Compare with:
    ▶ (11) and ♠ (1)
```

Monograms N (11) and N (5) may well be the same; their telescoping into one issue, however, would substantially change the pattern of die linkage for tightly-braided coins (making it far more complex and less intelligible), and so the two monograms have been left independent.

Monograms 47-49, as recorded by Seyrig, are unphotographed and not figured into present calculations. Note how his renderings are quite close to confirmed monograms:

Seyrig's 
$$\not\in$$
 (47)  $\rightarrow$   $\not\Rightarrow$  (17)  
Seyrig's  $\not\bowtie$  (48)  $\rightarrow$   $\not\bowtie$  (2)  
Seyrig's  $\not\curvearrowright$  (49)  $\rightarrow$   $\not\curvearrowright$  (23)

Coins of Myrina turn up in the same hoards as do those of Magnesiaon-Maeander, Cyme, and of other cities of Asia Minor whose coinages still remain to be studied. While discussion of the specific dates of these coinages is postponed until later in the paper, for now it is important to note that the Cymean and Magnesian wreathed coins were probably produced only for 10 to 15 years. Indeed, for the Magnesian series, the names of only eight different magistrates are found on the coins, and for Cyme there are only 12. Within the context of these coinages, the Myrinean monograms might also be understood to stand for the main magistrate of state, the minter, or a donor of a monetary liturgy. The nature of the Myrinean monograms, however, makes such an attribution more difficult. Because there are nearly 50 known monograms and because the hoards (discussed below) indicate that the coinage was produced for about ten years, then, on the average, about five monograms, or separate Myrinean issues, must have been produced yearly. The study of the order of emission (above), however, strongly suggests that there were few "average" years. The 18 tightly-braided issues must have been produced in the first few years, while the early middle period, with the intricately die linked three-braided Apollos, most certainly had more than five issues each year. The later three-braided coins, and especially the later twobraided specimens in which a few monograms contain dozens of obverse dies, could not have had nearly so many issues per year. Moreover, on rare occasion there may be two or three monograms on a particular coin, with names reappearing within different combinations. For example,

re appears by itself and as part of . Note also, the similar combinations

and is . These recurring monograms, along with the fact that the number of issues produced in a year may have fluctuated between (say) two and eight, reduces the possibility of magistrates or minters being represented by the monograms. The commemoration of liturgies is perhaps the best explanation, just as it is, for different reasons, the likely explanation at Magnesia.<sup>49</sup>



<sup>48</sup> The common hoards are listed by Morkholm (above, n. 38), p. 152, n. 34.

<sup>&</sup>lt;sup>49</sup> Jones, pp. 81-90. The names of some of the prominent Myrineans of this period are known (Pottier-Reinach, pp. 206-10), but there does not appear to be any definite correlation between them and the monograms on the coins.

### THE HOARD EVIDENCE

Until recently, the earliest hoard to contain the wreathed coins of Anatolia was the 1900 Babylon Hoard, dated to ca. 155 B.C.<sup>50</sup> The wreathed coins found there are from Cyzicus and Mytilene. (The Myrinean coins in that hoard, three in number, are late posthumous Alexanders.) The date for the introduction of the wreathed coins in Asia Minor has, however, been pushed back substantially by the recent publication of two Erythraean wreathed posthumous Alexanders. As they die link with unwreathed posthumous Alexanders found in the 1759 Latakia hoard, wreathed versions were likely being minted by the early 160s.<sup>51</sup> The presence in that hoard of Ilian coins, unwreathed but with a scheme otherwise similar to the wreathed Myrinean coins (the divine head on the obverse and a divine figure on the reverse), suggests that the general style was becoming fashionable by then.<sup>52</sup>

The wreathed tetradrachms of Myrina are obviously intimately related in date and purpose to those of Aegae, Cyme, Magnesia, and several other cities of Asia Minor.<sup>53</sup> A list of hoards containing Myrinean tetradrachms can be found in Table 6. Table 7 sets out the coin types, arranged by monogram, contained in each hoard, so far as they are known through illustration. Since Myrinean tetradrachms occur in all the hoards in which Magnesian coins are found<sup>54</sup> and in most of those in



<sup>50</sup> IGCH 1774; Boehringer (above, n. 34), pp. 17-19.

<sup>&</sup>lt;sup>51</sup> Morkholm (above, n. 38), p. 156. He dates the Latakia hoard to 169/8, as does *IGCH* 1544. M. Thompson, *Agrinion Hoard*, ANSNNM 159 (1968), pp. 82-83, had dated it to 165, H. Seyrig, *Trésors du Levant anciens et nouveaux* (Paris, 1973), hoard 11 to 170; hereafter cited as Seyrig, *Trésors* (with hoard numbers) and Boehringer (above, n. 34) to 164.

<sup>&</sup>lt;sup>52</sup> Bochringer (above, n. 34), pp. 17-19. For a list of states minting the unwreathed wide-flan tetradrachm, see N. M. Waggoner, "The Propontis Hoard (*IGCII* 888)," *RN* 1979, pp. 12-13.

<sup>53</sup> For the complete list, Morkholm (above, n. 38), p. 46; see also Jones, pp. 91-92. Artistic similarities can be at times extraordinarily close. Just as Oakley sensed the same engraver at work at Magnesia and Cyme (p. 20, n. 52), so too compare the Myrinean obverse Apollo with certain coins from Aegae (BMCTroas, pl. 18, 4 and 5).

<sup>&</sup>lt;sup>54</sup> Jones, pp. 74-75. Among hoards in which Myrinean coins are found and Magnesian are not, Asia Minor, 1964 (Table 6, 1) should be especially noted, as that is one of the earliest, dated to ca. 150.

which Cymean coins are also present, 55 we should expect a common period of production. Now, recent studies have dated the Magnesian issue to 155–1456 and the Cymean to a decade earlier. 57 Yet the coins of both series occur in essentially the same hoards, and there is, therefore, no compelling historical evidence which demands that these two coinages were issued a decade apart. Rather, the present differences in their dating rests upon a single hoard, the evidence of which is clearly open to reassessment. 58 Acknowledging the flexibility in such dating, we can say that the Myrinean issues are found in hoards which have been reasonably dated to the decade of the 140s. A ten year period of production, beginning perhaps as early as the mid-150s, is, therefore, indicated.

### TABLE 6

### Hoards

Listed within each hoard is the number of Myrinean wreathed tetradrachms found there. For the complete composition of these hoards and dating criteria, see the entries in *IGCH* or Seyrig, *Trésors*.

- 1. Southern Asia Minor 1964 (IGCH 1432) ca. 150-140; 2 coins
- 2. Akkar 1956 (IGCH 1559; Seyrig, Trésors 18) ca. 150-145; 12 coins<sup>a</sup>
- 3. Ghonsle 1955 (IGCII 1560; Seyrig, Trésors 19) ca. 150-145; 7 coins
- 4. El Alweiniye 1941 (*IGCH* 1550; Seyrig, *Trésors* 22) ca. 150–140; 15 coins
- 5. Haiffa 1906 (IGCH 1556; Seyrig, Trésors 20) ca. 145-140; 12 coins
- 6. Osmaniye 1968 (IGCH 1433) ca. 145; 20 coins



 $<sup>^{55}</sup>$  Oakley, pp. 10–13. Myrinean coins are also found in Haiffa, 1906 (Table 6, 5) and in Susiana, 1965 (number 11), where Cymean coins are absent. More significantly, Cyme is represented in the Urfa Hoard (*IGCH* 1772), which is datable only to some point after 160. This is the most important evidence for Oakley's dating.

<sup>56</sup> Jones, p. 80.

<sup>&</sup>lt;sup>57</sup> Oakley, pp. 10-15.

<sup>&</sup>lt;sup>58</sup> The higher Cymean chronology depends upon the interpretation of the Urfa hoard, in which Myrina is not represented (see above, n. 55).

- 7. Teffaha 1954 (IGCH 1557; Seyrig, Trésors 21) ca. 140; 4 coins
- 8. Kirikhan 1972 (CH 1, no. 87a & b; Seyrig, Trésors 23) ca. 140; at least 133 coins
- 9. Ras Baalbek "Zahle" 1957 (IGCH 1593; Seyrig, Trésors 24) ca. 140; 1 coin
- 10. Aleppo 1930 (IGCH 1562; Seyrig, Trésors 25) ca. 138; 1 coin
- 11. Susiana 1965 (?) (IGCH 1806) after 138; 4 coins
- 12. Baarin 1955 (IGCH 1567; Seyrig, Trésors 28) ca. 110; 1 coin
  - For the dating of the Akkar and Ghonsle hoards, see Jones, pp. 75-76.

While the hoards establish comfortable parameters for dating the coinage generally, they are less helpful in determining a specific order of emission. Where comparisons of condition can be made, coins of the different Apollo types seem to be about equally worn. For example, in the Ghonsle hoard of ca. 150, which is among the earliest hoards containing Myrinean wreathed tetradrachms, the three-braided specimens (two coins of issue 20) seem in about the same condition as the tightlybraided coins (coins from issues 1, 11, 17 and 35).59 Moreover, all three varieties of Apollos appear in the earliest hoards. Three-quarters of all known Myrinean wreathed tetradrachms are of the three-braided variety, 60 and, accordingly, the three-braided Apollos are overwhelmingly the best represented in the hoards (see the coin distribution in Table 7). There are found in the hoards four coins of two-braided type: one (36.64c) is in the South Asia Minor hoard, dated ca. 150-140; one (39.67k) in the Haiffa hoard of ca. 145-140; and two (42.74e and 77k) are in the Kirikhan hoard, dated to ca. 140. Eight tightly-braided Apollos have been found in hoards:<sup>61</sup> one in the Akkar hoard of ca. 150-145 (8.2a), three in the Ghonsle hoard of ca. 150-145 (1.1a, 11.4b, and 17.9c<sup>62</sup>), one



<sup>59</sup> Seyrig, Trésors 19.

<sup>60 304</sup> three-braided coins are known, 66 two-braided, and 46 tightly-braided.

<sup>61</sup> A coin of issue 18 of the Haiffa hoard may be three-braided or tightly-braided.

<sup>62</sup> Seyrig illustrates a coin which I have designated as issue 47, but which is probably issue 17.

## Table 7 Coin Types in Hoards

Com Types in Troutes														
anss 1 1 7 8	nariety 3	S. Asia Minor 1964 ca. 150–140	Akkar 1956 ca. 150–145	Ghonsle 19 <b>55</b> ca. 150–140	El Alweiniye 1941 ca. 150–140	Haiffa 190 <b>6</b> ca. 145–140	Osmaniye 1968 ca. 145	Te/faha 1954 ca. 140	Kirikhan 1972 ca. 140	Kirikhan 1972•	Ras Baalbek 1957 ca. 140	Aleppo 1930 ca. 138	Susiana 19 <b>65</b> a/ler 138	Baarin 19 <b>66</b> ca. 110
7	0	S	₹	ڻ. •	E	7	0	1	4	~	I	4	×.	N N
1	1 T			1					1					
,	T.		1						1					
11	T.			1						1				
14	т			•	1				2	•				
17	T			1	•				-	1				
18	3b		2	1	1	2		1	3	1 . 4				
19	3		2 2 2	•	-	2 2	_	-	3 2 4	_				
20	3		2	2	1	_	DISPERSED WITHOUT RECORD		4	3				
21	3						္ပ			3 1 3				
22	3				2	1	RE		2	3		1	3	
23	3	1					Ξ.		2 1 1 1		1			
24	3				2		C	2	1					
25	3				2 1	2	Ĭ,		1	1				
26	3						VIT		4	4				
27	3		3		4	1	>		2 2 3	3				
<b>2</b> 9	3				2	1 1 1	ED		2	2				
30	3					1	RS		3					
35	3			1		1	PE							
36	2°	1					ISI			1				
38	34						Ω		1					
39	2,3°					1			3 2	1				
42	2 <sup>t</sup>								2	1				
47	•		1											
48														1
49	•		1											

- There are 28 Myrinean tetradrachms in the Kirikhan hoard detailed in a letter from Hans Voegtli to Herbert Cahn and related to Nancy Waggoner at the ANS. As they have not been photographed and as some of the monograms identified are questionable, they have not been included in this study.
- <sup>b</sup> The monogram is both three- and tightly-braided. Of the coins illustrated, that from Teffaha (obverse 10) and that from El Alweiniye (obverse 11) are three-braided.
- <sup>c</sup> Coins with this monogram are of both the tightly-braided and two-braided varieties. Only the two-braided types have been found in hoards.
- <sup>d</sup> Coins of this monogram are both two- and three-braided; only a three-braided type (obverse 66) has been found.
- c Coins of this monogram are both two- and three-braided; both varieties have been found in the hoards: three three-braided coins of obverse 66 at Kirikhan and one two-braided coin of obverse 67 at Haiffa.
- f Coins of this monogram are both two- and three-braided: only the two-braided types (obverses 74 and 77) have been found.
  - Seyrig, Trésors, does not illustrate these: see the catalogue for references.



in the El Alweiniye hoard of 150-140 (14.7f), and three in the Kirikhan hoard of ca. 140 (14.4a and b, 7.2a). Because the hoards themselves cannot be precisely dated, either by absolute chronology or in relation to one another, they do not offer much help in determining the specific order of emission.

There is, however, an interesting feature of the hoard evidence: only four two-braided coins, or 6% of those known, are found in the hoards. On the other hand, there survive in the hoards eight of the tightlybraided Apollos, or 17% of those known, and approximately 25% of the known examples of the three-braided variety. 63 The small sample from which this comparison is drawn may render it statistically insignificant. However, the two-braided coins are anomalous in another way. Obverse die links for three- and tightly-braided coins are quite numerous. A barometer of this is their fairly high ratio of coins per obverse die, where any die links reduce the number of obverse dies and in turn increase the size of the ratio. The ratio for three-braided Apollos is over 5.4:164 and that for the tightly-braided Apollos is about 5.1:1.65 There are, however, few obverse die links among the two-braided Apollos, and this is reflected in a coin per obverse die ratio of under 2.1:1.66 Indeed, issue 45, which is two-braided, contains ten obverse dies, none of which forms a die link with an obverse of any other issue, and issue 42 contains eight obverses of the two-braided variety, none of which has any die links with other issues.<sup>67</sup> Such a lack of linkage distinguishes the twobraided from the other styles. No obvious explanation for the twobraided Apollo's apparently different patterns of production and distribution presents itself. Perhaps further hoard discoveries in different areas of Asia Minor will reveal a special export purpose for this type.



<sup>63</sup> Table 7 lists more than 75 certain three-braided coins found in the hoards—see the accompanying notes to the Table.

<sup>64 56</sup> obverses, 304 specimens.

<sup>65 9</sup> obverses, 46 specimens.

<sup>66 32</sup> obverses, 66 specimens.

<sup>67</sup> Monogram 42 also contains one three-braided obverse with no die links: obverse 72.

### THE DIE STUDY

The coinage under consideration has three distinct portraits of Apollo on its obverse and at least 46 reverse monograms; establishing the pattern of die linkage has therefore not been difficult. There are numerous reverse die links, and these have been indicated in the catalogue. These represent, however, only coins within a monogram which share reverse dies with coins of the same monogram. There can be no reverse die linkages between coins of different monograms, because the reverse bears the monogram, and there is no evidence of reverse dies being recut in order to change the monogram. Obverse die links, however, have proven to be quite intricate and revealing; a complete list of all these linkages has been provided in Table 2. All the issues of the tightlybraided Apollos and many of the three-braided Apollos have been connected through these obverse die links. Linkage between issues of the two-braided Apollos, as discussed above, is much less common. It should also be noted that, while the catalogue lists all monograms, or issues, individually, in Table 3 some similarly styled monograms are assumed to represent the same name and have thus been combined into a single issue; such conflation, of course, also affects the die links displayed in that chart.

Perhaps the most interesting result of the die study has been the exceptionally high number of obverse dies identified and their relationship to the total number of coins examined. By comparison with the coinages of its neighbors, that of Myrina proves to be surprisingly large. The die study of the Cymean coinage was based on 536 specimens and 78 obverse dies, with a coin per obverse die ratio of almost 6.9:1.68 For Magnesia, there are 243 coins and 36 obverse dies; the ratio is nearly the same, 6.7:1.69 The present study of Myrinean coinage, however, includes 416 coins and 97 obverse dies, yielding a coin per obverse die ratio of just over 4.3:1. This is, of course, well below the commonly employed yardstick of 6:1 which affords reasonable confidence that almost all obverse dies have been accounted for.70



<sup>&</sup>lt;sup>68</sup> Oakley, p. 4, with an obverse and four coins eliminated: see the following article by Kinns, pp. 50-52, nos. 7 and 9.

<sup>69</sup> Jones, pp. 64, and 73-80.

<sup>&</sup>lt;sup>70</sup> Oakley, p. 4, n. 13, for bibliography.

The significance of this unexpectedly large number of obverse dies is obvious. The Cymean coinage, with a coins per obverse die ratio of 6.9:1 and 78 known obverse dies, must have been substantially smaller than the Myrinean output, which, with only 4.3 coins per obverse die, nevertheless has already 97 obverse dies indentified. In itself, this is quite surprising, given our traditional notions concerning the relative size and wealth of the two cities.

The differences in coins per obverse die ratios for Magnesia, Cyme, and Myrina is confirmed upon closer examination. Though for both Magnesia and Cyme the cumulative proportions exceed 6:1, in several instances individual obverses fall well below that index figure. For example, out of 36 extant Magnesian obverses, 12, or 33%, survive through three coins or fewer. Low ratios are also evident for some Cymean coins: of the 78 obverses for that coinage, 32, or 41%, have a coin per obverse die ratio of three or less. This indicates that, while the overall ratios for these coinages are above 6:1, it is far from statistically certain that all obverses have been accounted for. Yet in the case of Myrina, the number of obverse dies with low coins per obverse die ratios is even higher, for 60 of the 97 obverses, or nearly 62%, survive through no more than three coins each. This confirms that a larger number of Myrinean obverses remains unknown.

Indeed, the accident of hoard discovery may have served to inflate the number of Cymean coins relative to the Myrinean, and thus the statistics cited above might not even do justice to the size of the Myrinean production. The most spectacular recent discovery of Greek coins is that of Kirikhan. While 1,046 coins have been recorded, 5,000 is the estimated original size.<sup>74</sup> Of the recorded coins, 148 Myrinean tetradrachms have



<sup>&</sup>lt;sup>71</sup> Jones, pp. 100-109. Obverse 6, 7, 15, 23, 35, and 36 have one coin each; obverses 11 and 26 have two coins; and obverses 18, 19, and 22 have three coins.

<sup>&</sup>lt;sup>72</sup> Oakley, pp. 25–36; Obverses 15, 18, 26, 30, 33, 46, 47, 48, 52, 62, and 67–73 have one coin each; obverses 25, 32, 35–38, 45, and 60 have two coins; and obverses 14, 17, 27, 42–44, and 50 have three coins each.

<sup>&</sup>lt;sup>73</sup> One coin per obverse: obverses 3, 9, 14, 15, 26, 28, 35, 45, 47-49, 51, 52, 55, 61, 65, 73, 75, 78, 79, 83, 84, 92, 94, 96, and 97. Two coins per obverse: 7, 16, 22, 31, 35, 42, 43, 59, 62, 63, 71, 72, 74, 77, 80, 82, 85, 86, 88-90. Three coins per obverse: 23, 30, 34, 50, 54, 64, 68, 69, 81, 87, 91, 93, 98.

<sup>&</sup>lt;sup>74</sup> CH 1, no. 87a; see Jones, p. 64, n. 5.

been clearly identified.<sup>75</sup> This suggests that the Myrinean coins made up a sizeable percentage of the original hoard and that the coins under discussion here are only a sampling of that coinage. Nevertheless, the number of Myrinean tetradrachms in the Kirikhan hoard appears small when compared with the number of Cymean and Magnesian coins found there: 443 and 269, respectively. With many of the coins now in circulation, this single find has had a far greater impact on the extant collection of the coinages of Cyme and Magnesia than on that of Myrina. As such, the Kirikhan hoard may have actually exaggerated present notions about the original size of the Cymean and Magnesian coinages at the expense of the Myrinean. Yet even with this possible distortion, the Myrinean coinage appears to have been larger than both the Cymean and the Magnesian. The difference in size is especially impressive as the duration of minting was quite short.<sup>76</sup>

#### HISTORICAL SETTING

The wreathed tetradrachms of Myrina have a significance far beyond their aesthetic appeal. Being part of a series of coins of similar style and format, most of which are adorned on their reverses with a wreath, the Myrinean wreathed issues in particular must be accounted for here, if sweeping historical interpretations are to be applied to the hellenistic wreathed coinages in general. The debate over the appearances of the wreathed coins is well known, and the dating of the Myrinean coins does not appear to affect the question.<sup>77</sup> Those who ascribe political or economic significance to the wreath date its introduction to the period of the mid-160s.<sup>78</sup> While their specific arguments appear to have been



<sup>&</sup>lt;sup>75</sup> CII 1, no. 87 a & b. Hans Voegtli has seen perhaps 28 more (Table 7, n. a).

<sup>&</sup>lt;sup>76</sup> Mr. Kinns has kindly made available his study of obverse dies of the other Western Asia Minor wreathed coinages: Acgae (4), Colophon (1), Heraclea (ca. 30), Lebedus (9), Smyrna (pre-133 variety: 9). These figures indicate that Myrina must have had the most productive mint in the area.

<sup>77</sup> Mørkholm (above, n. 38), p. 154.

<sup>&</sup>lt;sup>78</sup> Lewis, Bochringer, and Giovannini, whose specific works, dating, and reasons for them can be found most recently summarized by Morkholm (above, n. 38), pp. 145–47.

answered effectively,79 the appearance of the Myrinean wreathed issue could be made to fit their chronologies.

Otto Mørkholm, however, advancing an argument proposed by Louis Robert, has argued well that the wreath—at least by the time it is employed in Asia Minor—is less a political symbol than a current artistic style. This analysis seems correct, for Myrina, in its two previous issues of silver, the Seleucid and the posthumous Alexander types, appears to have acted simply in concert with her neighbors. The minting of the posthumous Alexanders began in Myrina not long after the Seleucid type ended (see Table 6) and assuredly continued until the decision to mint the spread-flan type of the 150s. In fact, in the 1950 Latakia Hoard, dated to ca. 150–14581 or to 140,82 the posthumous Alexander found there is in excellent condition.83

One additional question concerning these coins needs to be addressed. Pottier and Reinach, when digging exhaustively through Myrina's midsecond century B.C. necropolis, failed to find a single tetradrachm of the wreathed style. Indeed, tetradrachms of Myrina and of the surrounding cities turn up only in hoards found in areas controlled by the contemporary Seleucid kingdom. Rostovtzeff, impressed by the quantity of

- 80 Morkholm (above, n. 38); see most recently, Oakley, pp. 16-20.
- 81 Seyrig, Trésors 16.
- 82 IGCH 1561 (Alexander Balas being the latest coin); admittedly, its composition suggests a savings hoard. The coin was inadvertently omitted in IGCH.

- 84 Pottier-Reinach, p. 48.
- 85 For Myrina, only one hoard (Southern Asia Minor, 1964) may have been outside of Scleucid territory; but the fact that the area was in the south—the only part of Asia



<sup>79</sup> Especially those of Bochringer and Giovannini: see Jones, pp. 93-96; Oakley, pp. 16-18; N. Waggoner, "Coins from the William P. Wallace Collection," *ANSMN* 25 (1980), pp. 12-13; and especially Morkholm (above, n. 38), who makes telling arguments against Lewis as well.

<sup>83</sup> Seyrig, Trésors 16,4. Numerous examples of Myrinean posthumous Alexander coins are found in hoards dated to near the beginning of the wreathed coinage: Tell Kotchek 1952 (IGCH 1773), 170–155 B.C.; Latakia 1759 (IGCH 1544), ca. 169; Aleppo 1931 (IGCH 1546), ca. 164; Babylon 1900 (IGCH 1774), 155–150; and Asia Minor 1964 (IGCH 1432), ca. 150. Robert Bauslaugh is studying the posthumous Alexanders of various mints in Asia Minor and has kindly shared his preliminary results. For present purposes, it is sufficient to note that by far the largest number of Myrinean Alexanders known comes from the period 190–160 B.C.

these coins and the locations of the hoards, postulated his famous theory of an *entente cordiale* between Pergamum and Seleucid Syria: with the loss of the silver mines in Asia Minor after 188, the Seleucids struck an agreement with Pergamum, whereby the same silver would come into Seleucid territory via the mints of Myrina, Cyme, Aegae, and the like.

Rostovetzeff's interpretation has received virtually no support since he put it forward and, instead, has been attacked frequently. Taken in its simplest expression, the theory is quite vulnerable: such a specific policy of state on Pergamum's part appears implausible, and probably impossible in any case for it to implement. Further, there is no evidence that, as a consequence of the treaty of 188, the Seleucids were forced to give up areas which contained their traditional sources for silver.86

Nevertheless, Rostovtzeff has performed a service by emphasizing the unusual fact that the wreathed coins of Asia Minor, especially those of Cyme, Magnesia-on-Maeander, and Myrina, turn up almost exclusively in hoards located within Seleucid territory. We know that mints in other states in Asia Minor were producing coins for the Seleucid Kingdom by the last quarter of the third century. The wreathed coins of the late 150s fit this pattern, perhaps or perhaps not as coins produced specifically for Seleucid use, but certainly as a reflection of a general flow of silver toward the trade routes of the Orient.<sup>87</sup> The abundance of Cymean, Magnesian, and Myrinean silver found in Seleucid hoards of the 140s may ultimately be attributed to subtle forces, such as the flight of silver away from the Pergamum kingdom, with its artifically high valuation of the cistophoric standard.<sup>88</sup> But we should bear in mind that posthumous Alexanders from these same cities also appear, albeit in smaller quantities, in Seleucid hoards of the previous generation.<sup>89</sup> This

Minor held by the Seleucids after 188—brings into question even that single exception. Cymean coins have, however, been found at Agrinion in Aetolia (*IGCH* 271); compare Oakley, p. 12.



<sup>&</sup>lt;sup>86</sup> Bochringer (above, n. 34), pp. 47-50, with additional bibliography, p. 49, n. 15; also Jones, pp. 92-93.

<sup>87</sup> Morkholm (above, n. 35), p. 302. The size of the Kirikhan hoard and the significance of Anatolian wreathed coins to that hoard probably fit within this context.

<sup>88</sup> Jones, pp. 90-100; but see Oakley, pp. 18-20, contra.

<sup>&</sup>lt;sup>89</sup> M. I. Rostovtzeff, "Some Remarks on the Monetary and Commercial Policy of the Seleucids and Attalids," in W. M. Calder and J. Keil, eds., *Anatolian Studies Presented to William Helburn Buckler* (Manchester, 1939), pp. 277-98; see Oakley, p. 20, n. 51.

attests a general trade pattern, with western silver paying for eastern goods. Rostovtzeff himself understood this, but sought to underline the phenomenon with a complex, and unnecessary, political explanation.

If the Myrinean issues do not appear to reflect an important political agreement between Pergamum and the Seleucid kingdom, they none-theless have historical significance. The extraordinary quantity of obverse dies of the Myrinean coinage puts the emissions of Cyme into better perspective and disproves the traditional view of the relative prominence of Cyme over Myrina. Undoubtedly, Myrina was extremely prosperous in the second century, aided by a thriving pottery industry and control of Gryneium. A sound understanding of the economic relationship between Myrina and Cyme, as well as that of their neighboring states, so far as it is reflected in the production of silver coins, awaits the study of the remaining wreathed coinages of Anatolia.

Table 8
Weights

	No. of	No. of	No. of
Weights	Tightly-Braided	3-Braided	2-Braided
over 17.00		2	
16.90-16.99	6	5	
16.80-16.89	8	15	1
16.70-16.79	4	24	5
16.60-16.69	5	24	
16.50-16.59	5	27	5
16.40-16.49	2	<b>2</b> 3	3
16.30-16.39	1	23	2
16.20-16.29	2	19	8
16.10-16.19		20	2
16.00-16.09		7	3
15.90-15.99	1	6	3
15.80-15.89		10	1
15.70-15.79		3	2
15.60-15.69	1	8	
15.50-15.59		5	3



15.40-15.49	4	3
15.30–15.39	2	2
15.20–15.29	1	
15.10-15.19	4	1
15.00-15.09	4	3
14.50-14.99	6	5
14.00-14.49	3	
13.00-13.99	1	2

## **CATALOGUE**

The catalogue is divided in broadest terms by obverse: tightly-braided, three-braided, and two-braided, in that order. Within each variety, the catalogue is further divided by reverse monograms denoting issues. Within each issue, arabic numerals identify the specific obverses. An identical arabic number within different issues indicates an obverse die linkage. For a complete list of all obverse die linkages, see Table 2. For issues 18 and 37–39, 42–43 where more than one variety of Apollo is represented, the issue is grouped with the dominant variety; the coins of the second variety are also noted. Lowercase letters indicate the different reverse dies. Within an issue, two different obverses with the same lowercase letter indicates a reverse die linkage; e.g., 11.2a and 11.5a. Because the monograms on the reverse define the issues, there can be no reverse die linkages between different issues.

Wherever known, die axes which are not the usual 12 o'clock are given. Specimens marked with an asterisk are illustrated in the accompanying plates.

#### **TETRADRACHMS**

## TIGHTLY-BRAIDED ISSUES

# Issue 1 🖨

- 1a. \*Numismatica Wien 7, 13 Feb. 1975, 117 -- Kölner Münz. 14, 9 Apr. 1974, 37, 16.92 g; Paris R2102 = Seyrig, *Trésors* 19,6, 16.88 g
- 1b. Kress 158, 8 Nov. 1973, 410



# Issue 2 😹

1a. \*BMCTroas, p. 136, no. 18, 16.89 g

# Issue 3 **k**

1a. \*Vienna 16866, 16.57 g

1b. Glendining, 7 Apr. 1976, 24

#### Issue 4 🕅

1a. \*BMCTroas, p. 136, no. 19, 16.70 g

# Issue 5 K

2a. \*Kress 165, 2 Apr. 1976, 304, 16.25 g

# Issue 6 [ (monogram in right field)

2a. \*Naville 5, 18 June 1923, 2493, 15.95 g

# Issue 7 🏚

2a \*Kirikhan hd. (ANS photo), 16.81 g

# Issue 8 🏚

2a. \*Seyrig, Trésors 22, 13, 16.90 g; BMCTrous, p. 136, no. 16, 16.67 g

2b. Berlin, 16.55 g

## Issue 9 **E**

2a. \*Schlessinger 13, 4 Feb. 1935 (Hermitage), 1214, 16.4 g

## Issue 10 M

3a. \*Berlin (Löbbecke), 16.80 g

#### Issue 11 N

2b. \*Münz. u. Med. AG FPL 42, 9 Jan. 1981, 17 - Harmer, Rooke, 28 May 1974, 1243, 16.75 g

4b. \*Seyrig, *Trésors* 19,7, 16.70 g

5a. \*Paris 352, 16.85 g; Numismatic Review and Coin Galleries FPL 4 nos.
 5. 6, 1963, 74 : Raymond, 31 Jan. 1939, 244 : Naville 12, 18 Oct. 1926, 1751, 16.74 g : Glendining-Seaby 2, 15 July 1929, 415

# Issue 12 %

4a. \*Hamburger, 11 June 1930, 313, 16.47 g

# Issue 13 K

6a. \*Spink, NCirc 1972, 6170, 16.56 g



### Issue 14 A

- 4a. \*Kirikhan hd. (ANS photo), 16.81 g; ANS = J. Hirsch 13, 15 May 1905 (Rhousopoulos), 3570, 16.74 g
- 4b. Kirikhan hd. (ANS cast), 16.74 g
- 4c. Münz. u. Med. AG 423, June 1980, 14, 16.93 g
- 4d. Hess 224, 18 Feb. 1936, 1323 J. Schulman, 20 May 1912, 138a, 16.8 g
- 4e. Bourney, 6 Dec. 1978, 75, 16.86 g
- 7f. Paris R 2101 = Seyrig, Trésors 22,15, 16.82 g
- 7g. BMCTroas, p. 136, no. 17, 16.65 g

#### Issue 15 M

6a. \*ANS 16.21 g; McClean 7948, 16.34 g

## Issue 16 N

6a. \*In trade (Baldwin's, 1981), 16.75 g; Berlin 16.61 g

## Issue 17 **★**

- 6a. \*Münz. u. Med. AG 41, 18 June 1970, 166, 16.55 g
- 8b. \*ANS, 16.92 g; Ciani-Vinchon, 6 Feb. 1956, 526, 16.93 g; Numismatica Wien 7, 13 Feb. 1975, 118, 16.87 g
- 9c. \*Seyrig, Trésors 19, 10, 16.57 g

### THREE-BRAIDED ISSUES

## Issue 18 ≰

- 2a. \*Münz. u. Med. AG FPL 349, Sept. 1973, 13, 15.63 g (obverses 2, 3, and 5 are tightly-braided)
- 3b. \*Myers-Adams 3, 12 Oct. 1972, 116 = Stack's, 19 June 1969, 160 = Münz u. Med. AG FPL 229, Feb. 1963, 9, 16.64 g
- 5c. \*Ariadne Galleries, 9 Dec. 1981, 198, 16.61 g
- 10d. H. M. F. Schulman, 20 May 1966, 722, 16.04 g; Cahn 65, 15 Oct. 1929, 197, 15.85 g
- 10e. Kreisberg-Cohen, 18 Mar. 1964, 41; ANS, 15.67 g
- 10f. SNGvAulock 1664, 16.48 g; Paris R2099 = Seyrig, Trésors 21,5, 15.77 g; BMCTroas, p. 136, no. 11, 16.85 g
- 10g. \*ANS, 16.22 g; Coin Galleries, 12 Nov. 1964, 461 = Coin Galleries FPL, 1 May 1964, A73, 16.3 g; ANS photofile, "lot 345" (cat. info. not preserved)
- 10h. Stack's, 6 Sept. 1973, 432, 16.3 g
- 10i. Kirikhan hd. (ANS photo) 16.77 g
- 10j. Wintherthur 2845, unpubl.
- 11f. Kirikhan hd. (ANS photo) 16.31 g
- 11g. Berlin 10 (C.R. Fox 1873) 16.86 g
- 11h. Dresden 1232, 15.288 g
- 11k. SNGCopAeolis 221, 16.10 g; Myers 2, 11 May 1972, 123



- 111. \*Seyrig, Trésors 22,12, 16.38 g; G. Hirsch 82, 13 Feb. 1973, 142, 16.28 g
- 11m. ACNACDewing 2231, 16.11 g
- 12k. \*Nomos AG FPL, 2 Nov. 1973, 37
- 12n. Glendining, 16 Nov. 1977, 5; Berlin 9 (Löbbecke), 15.955 g; Hess, 7 Mar. 1935, 388 = Hess 209, 12 Apr. 1932, 30 = Hess 202, 28 Oct. 1930, 2569 = Cahn 61, 4 Dec. 1928, 140, 16.4 g = Rosenberg, 8 Sept. 1924, 198 = Hess, 30 Apr. 1917, 1208
- 12o. Platt, 3 Apr. 1933, 157
- 13p. Berk FPL 1, Apr. 1974, 118; Vienna 35739, 15.34 g
- 13q. Sotheby (New York), 16 July 1981, 25 = Gadoury (Monte Carlo), 13 Oct. 1980, 315, 16.25 g
- 13r. \*Hamburger, 27 May 1929, 296, 16.60 g
- 14s. \*J. Hirsch 30, 11 May 1911, 560, 15.48 g
- 15s. \*Paris 350, 16.47 g
- 16t. \*Ratto, 8 Feb. 1928, 613 = Sotheby (London), 3 Apr. 1914 (Hazeldine), 55, 16.55 g
- 16u. Kirikhan hd. (ANS photo), 16.78 g

#### Issue 19 **★**

- 17a. \*ANS, 16.29 g
- 17b. Sotheby, 23 Mar. 1896 (Montage), 532, 15.1 g
- 17c. ANS photofile, "lot 183" (cat. info. not preserved)
- 17d. SNGParis Delepierre 2560, 16.32 g
- 18b. Peus 277, 25 Oct. 1971, 118, 15.55 g
- 18e. \*ANS = Baransky 4, 25 Feb. 1931, 659 = Naville 7, 23 June 1924 (Bement), 1416 = J. Hirsch 13, 15 May 1905, 3568, 15.16 g; Myers-Adams 5, 15 Mar. 1973, 194; Paris 343, 15.67 g; SNGFilzwilliam 4328, 15.65 g
- \*Naville 16, 3 July 1933, 1372 = Sotheby, 20 July 1914 (Schles. y Guz.),
  78 = Sotheby, 13 June 1911 (Sandeman), 239 = Sotheby, 24 Feb. 1904,
  68, 16.38 g
- 19g. ANS 16.36 g
- 19h. Kirikhan hd. (ANS cast), 16.57 g
- 20i. Seyrig, *Trésors*, 20,10 = \*J. Hirsch 19, 11 Nov. 1907, 519; Dupriez 90, 12 Dec. 1906, 22, 16.60 g
- 21j. \*Ball 8, 5 Dec. 1932, 2031, 15.1 g
- 21k. Bourgey, 26 Oct. 1981, 54 = Bourgey, 13 Nov. 1980, 58, 16.28 g
- 221. \*Kirikhan hd. (ANS photo), 16.31 g; BMCTroas, p. 136.12, 16.26 g
- 23m. \*Bourgey, 20 Mar. 1975, 50, 16.08 g
- 23n. Berlin 7 (Löbbecke), 16.14 g
- 24o. \*Berlin (9781), 16.04 g

#### Issue 20 A

- 15a. \*Ratto 1909 (Froehner), 3751, 16.50 g
- 17b. Glendining, 21 Feb. 1961 (Lockett), 2222 = SNGLockett 2749 = Naville 1, 4 Apr. 1921 (Pozzi) 2307, 14.62 g



- 17c. Stack's, 10 June 1970, 342 = Stack's 26 May 1951, 659 = \*Naville 14, 2 July 1929, 348, 16.28 g
- 17d. Kirikhan hd. (ANS cast), 16.54 g
- 19e. Ancient Gems, 31 Oct. 1972, 61 = Naville 12, 18 Oct. 1926, 1752 = \*Hirsch 32, 14 Nov. 1912, 531, 16.40 g
- 19f. Monetarium 37, 1982, 48 Monetarium 27, 1978/9, 45, 16.71 g
- 20g. \*Münz. u. Med. AG FPL 329, Nov./Dec. 1971, 177, 16.18 g; Toronto, 16.02 g 1
- 20h. Feuardent, 17 Dec. 1919 (Collignon), 321
- 20i. Berlin, 16.00 g
- 20j. Bayerische Vereinsbank 2, 6 Nov. 1979, 166, 16.359 g
- 21c. Numismatica Wien 13, 9 Nov. 1976 (Wendt), 249, 15.92 g
- 21i. Vienna 16867, 16.25 g
- 21k. \*Sotheby, 3 Feb. 1909 (Benson), 661 = Sotheby, 7 Dec. 1896 (Bunbury), 135, 16.35 g
- 211. 's Gravenhage 5549, 16.70 g
- 21m. Kölner Münzkabinett 26, 23 Nov. 1979, 45, 16.77 g
- 21n. Sotheby, 19 Jan. 1914 (Cumberland Clark), 223, 16.3 g
- 210. Bourgey, 11 Mar. 1980, 114, 16.70 g; Luigi de Nicola, Dec. 1966, 245 = Naville 1, 4 Apr. 1921, (Pozzi) 2306, 15.66 g
- 21p. Kirikhan hd. (ANS photo), 16.75 g; (?) Kirikhan hd. (ANS photo), 16.88 g
- 231. \*Sternberg, 25 Nov. 1976, 79, 16.76 g
- 24b. \*Paris 347, 15.81 g
- 25q. Rosenberg 72, 11 July 1932, 591 = Hess 209, 12 Apr. 1932, 29, 16.45 g
- 25r. \*ANS, 16.19 g; Gadoury (Monte Carlo), 13 Oct. 1980, 317, 16.35 g
- 26s. Glendining, 18 Apr. 1955, 479 = Münzhandlung Basel 10, 15 Mar. 1938, 311 = Hess 207, 1 Dec. 1931, 552 = Hamburger, 11 June 1930, 801 = \*Ratto, 13 May 1912, 923, 16.19 g
- 26t. Schweizerischen Kreditanstalt (Bern) FPL 20, Aug. 1976, 51
- 28d.90 BM (1947), 16.15 g
- 28i. G. Hirsch 84, 27 June 1973, 103, 16.24 g; Munich 16.524 g
- 28t. Kirikhan hd. (ANS photo), 16.78 g
- 28u. \*Schlessinger 11, 26 Feb. 1934, 289
- 28v. 's Gravenhage (v. Rede), 16.23 g
- 28w. SNGCopAeolis, pl. 5, 223, 14.24 g
- 28x. ANS photofile, "lot 145" (cat. info. not preserved)
- 29q. \*Kricheldorf, 15 Oct. 1955, 429, 16.49 g
- 30k. \*Munich, 16.354 g



<sup>&</sup>lt;sup>90</sup> There is no obverse number 27: the single coin of that obverse has recently been identified by Kinns as a forgery (Ball 6, 9 Feb. 1932, 331); see below, p. 51, number 9.

- 31. \*Stack's, 27 June, 1952, 1138 (reverse uncertain for die linkage).
  - i. Vienna 13868, 13.50 g (obverse uncertain)
  - G. Hirsch 82, 13 Feb. 1973, 141 = G. Hirsch 71, 8 Mar. 1971, 203, 16.28 g (obverse uncertain)

For forgeries of this issue, see the accompanying article by Kinns, numbers 7-9.

# Issue 21 $\square$

25a. \*Kirikhan hd. (ANS photo), 16.58 g

# Issue 22 A

- 15a. \*ANS, 16.13 g
- 19b. SNG Victoria and Albert (Salting) 32 = \*Sotheby 23 May 1894 (Cafrae), 215, 16.3 g; Peus 301, 25 May 1981, 394, 16.68 g
- 19c. Bruun Rasmussen 245, 10 Mar. 1970, 751, 15.85 g
- 19d. Kirikhan hd. (Baldwin's, 1981), 16.68 g
- 19e. Vienna 16864, 15.96 g
- 19f. Paris 348, 16.47 g
- 20g. \*Malloy FPL 33, 1973/1, 325
- 21d. Munich, 14.973 g
- 21f. Kress 158, 8 Nov. 1973, 412
- 21h. \*Naville 7, 23 June 1924 (Bement), 1415 J. Hirsch 21, 16 Nov. 1908 (Weber), 2670 = Dupriez 90, 12 Dec. 1906, 17, 16.55 g
- 21i. Oxford, 16.62 g
- 24j. Coin Galleries, 19 Nov. 1971, 119; \*Paris R 2098, 15.68 g; SNGvAulock 1663 (El Alweiniye hd.), 16.25 g
- 25b. \*Kirikhan hd. (ANS photo), 16.85 g
- 25e. G. Hirsch 87, 1 Apr. 1974, 148, 16.53 g
- 25g. Kölner Münzkabinett, 24 Oct. 1978, 110, 16.68 g
- 28g. Seyrig, Trésors 20,5
- 28i. Ciani-Vinchon, 6 Feb. 1956, 525 Feuardent, 9 Feb. 1913, (Burel), 274, 15.23 g
- 28k. Münz. u. Med. AG FPL 265, June 1966, 8, 16.77 g; McClean 7947, 16.1 g
- 28l. \*ANS, 16.29 g

#### Issue 23 A

- 15a. \*Paris 341, 15.86 g; Berlin 5, 15.99 g
- \*Ball 6, 9 Feb. 1932, 329
   J. Schulman, 6 June, 1910, 231, 14.8 g; Ball 6, 9 Feb. 1932, 330, 14.7 g; Berlin, 15.66 g 91
- 25b. Brussels, 16.45 g; BMCTroas, p. 136, no. 8, 16.68 g
- <sup>91</sup> The two coins in the Ball catalogue are near duplicates, differing only slightly at the bottom of the obverse wreath. The castmaker may have erred in creating two coins out of one, but the catalogue states firmly that they are two different coins. A forgery made from a cast of the Berlin piece cannot be ruled out.



- 25c. S. Asia Minor 1964 (*IGCH* 1432) = C. Boehringer, Zur Chronologie, pl. 39, 15, 16.66 g
- 25d. Coin Galleries FPL 4, Sept. 1960, A515
- 25e. Hess-Leu 24, 16 Apr. 1964, 196, 16.63 g
- 25f. \*Kirikhan hd. (ANS photo); ANS, 15.87 g
- 30f. Bourgey, 5 Dec. 1977, 92, 16.56 g
- 30g. \*Bourgey, 20 Mar. 1975, 51, 15.81 g
- 31h. Oxford \*Glendining, 31 Jan. 1951, 205, 16.44 g

## Issue 24 A

- 25a. \*Schlessinger 13, 4 Feb. 1935 (Hermitage), 1212, 15.4 g
- 25b. Glendining-Seaby 2, 15 July 1929, 414
- 32c. \*Münz. u. Med. AG, FPL 278, July 1967, 7, 16.75 g; Superior Stamp and Coin, 17 June 1974, 245 -- Peus FPL 29, July 1972, 13 = Peus FPL 25, Oct. 1971, 22; J. Schulman, 4 Feb. 1957, 1227, 16.1 g
- 32d. Superior Stamp and Coin, 10 Feb. 1975, 1991
- 32e. ANS, 16.37 g 🖊
- 32f. Malloy FPL 27, 1972, 343
- 32g. Paris R2096 = Seyrig, Trésors 22,6, 16.12 g
- 33f. Giessener Münzhandlung 19, May 1981, 60
- 33g. \*ANS, 16.67 g; ANS photofile "lot 13" (erroncously labelled "Hesperia Art 9")
- 34h. G. Kastner, 27 Nov. 1973, 81, 16.61 g
- 34i. \*Locker Lampson 279, 16.39 g; Kirikhan hd. (ANS photo), 16.81 g; Paris R2095 = Seyrig, Trésors 21,4, 16.45 g
- 35j. Paris (de Luynes 2532), 16.59 g
- 35k. \*Paris 126 (Armand-Valton), 16.33 g; Munich, 15.485 g
- \*Vinchon, 29 Apr. 1974, 101, 16.22 g For forgeries of this issue, see number 4 of the article by P. Kinns in this issue of ANSMN.

#### Issue 25 A

- \*Münz. u. Med. AG, 5 Dec. 1968, 211 = A. Houghton and G. Le Rider,
  "Un Trésor de Monnaies Hellénistiques Trouvé près de Suse," RN 1966,
  p. 174, pl. 10. 16.905 g
- 37b. Kirkikhan hd. (ANS photo); Peus FPL 39, May 1975, 250; Ratto, 9 Oct. 1934, 205 = Naville 15, 2 July 1930, 932 Ratto 13 May 1912, 922 = Cahn FPL 24, Nov. 1912, 656, 16.72 g
- 38c. \*Glendining, 7 Apr. 1971, 88, 16.26 gr.; Platt, 27 Mar. 1922 (Luneau), 624; *BMCTroas*, p. 136, no. 9, 14.38 g
- 39d. \*Paris 342, 16.46 g
- 40b. SNGFitzwilliam 4329, 15.09 g
- 40e. \*BMCTroas, p. 136, no. 10, 16.18 g
- 40f. Gadoury (Monte Carlo), 13 Oct. 1980, 314, 16.85 g



#### Issue 26 🔀

- 37a. \*Kirikhan hd. (ANS photo)
- 37b. SNGvAulock 1661, 16.11 g
- 37c. Superior Stamp and Coin FPL, fall 1980, 58, 16.42 g
- 38d. \*Berlin (v. Gansauge 1873), 15.85 g; SNGFilzwilliam 4327, 16.29 g
- 39e. \*Sotheby, 30 Nov. 1973, 118, 16.15 g
- 40f. Kirikhan hd. (ANS photo), (CH 1, no. 80).
- 40g. Paris R2097 (El Teffaha hd.) = Seyrig, *Trésors* 21, 6, 16.68 g
- 40h. \*ANS, 15.53 g
- 41a. \*Kirikhan hd. (ANS photo); Ratto 4, 1 Apr. 1927, 1874 = Helbing, 9 Apr. 1913, 527, 15.80 g
- 42b. Münz Zentrum 43, 27 Apr. 1981, 103 = \*Münz Zentrum 39, 16 Apr. 1980, 622, 16.56
- 42e. Oxford, 16.55 g
- 43e. \*Paris (Delepierre 2559), 16.24 g
- 43f. Kricheldorf 26, 19 Feb. 1973, 88
- 44i. \*Kirikhan hd. (ANS photo)
- 45j. \*Kastner 6, 26 Nov. 1974, 104, 16.63 g

# Issue 27 ¥

- 37a. \*Paris (de Luynes 2533), 174, 15.84 g
- 37b. Paris 349, 16.58 g
- 38c. \*Kirikhan hd. (ANS photo)
- 39b. Maringe-Poindessault, 18 June 1980, 127, 16.92 g
- 39c. Naville 17, 3 Oct. 1934 (Burrage), 549, 16.15 g
- 39d. \*Coin Galleries, 29 Apr. 1976, 903 · Glendining, 5 Mar. 1970, 63, 15.83 g
- 39e. Peus 299, 6 May 1980, 174, 16.62 g
- 40c. \*Maringe-Poindessault, 18 June 1980, 128, 16.73 g
- 41a. \*Kirikhan hd. (ANS photo) 16.90 g; BMCTroas, p. 136, no. 15, 16.31 g
- 42c. Glendining, 3 Dec. 1929 (Nordheim-Anderson), 722 = \*J. Hirsch 34, 5 May 1914, 474 = J. Hirsch 31, 6 Dec. 1912, 456 = J. Hirsch 13, 15 May 1905 (Rhousopoulos), 3539, 16.10 g
- 42f. Peus 294, 15 Mar. 1978, 262, 16.81 g
- 44g. \*Seyrig, Trésors 20, 13 Dupriez 90, 12 Dec. 1906, 24
- 44h. Münz. u. Med, AG FPL 177, Mar. 1958, 31 = Kricheldorf 4, 7 Oct. 1957, 304, 14.37 g; Platt, 18 Nov. 1935 (C. Bougon), 79 = Platt, 2 May, 1921, 95 = Egger 46, 1914, 739, 16.45 g
- 44i. 's Gravenhage 5548, 16.47 g
- 46a. Peus 294, 15 Mar. 1978, 261, 16.79 g
- 46i. BMCTroas, p. 136, no. 14, 12.04 g (low weight due to damage and not considered on weight chart)
- 46j. Feuardent, 19 Dec. 1921, 142 -= Jameson 1, 1461, 16.40 g
- 46k. \*Harmer, Rooke, 19 June 1973, 184B, 16.53 g
- 47a. \*Kastner 8, 25 Nov. 1975, 58, 16.77 g
- 48c. \*Kress 156, 2 Apr. 1973, 303, 15.55 g



- 49e. \*Coin Galleries, 5 June 1980, 105, 16.59 g
- 50h. \*Egger 46, 11 May 1914, 738, 16.50 g
- 501. Sotheby, 1 Dec. 1924 (Kondylis), 168; Stack's, 15 June 1972, 431 = Coin Galleries, 20 Apr. 1961, 135, 16.61 g
- 51c. Müller 30, 11 Sept. 1980, 156, 16.7 g
- 51m. Paris R2100 = \*Seyrig, Trésors 22,10, 16.42 g

### Issue 28 💥

52a. \*ANS, 15.06 g

## Issue 29 BN

- 30a. \*Kirikhan hd. (ANS photo)
- 30b. Constantinople Fine Arts FPL 1, 1976, 96; Vinchon, 22 Feb. 1971, 151
- 31a. \*Berlin (Lobbecke), 16.14 g
- 32c. \*Hess 249, 13 Nov. 1979, 205, 16.84 g
- 33d. Münz. u. Med. AG 52, 19 June 1975, 176, 16.65 g
- 33e. ANS, 15.98 g; \*Kirikhan hd. (ANS photo); BM (1904), 17, 16.63 g
- 33f. ANS, 16.19 g
- 33g. Vienna 16832, 15.69 g; Weber 5565 = Naville 4, 17 June 1922, 810, 16.16 g; Gadoury (Monte Carlo), 13 Oct. 1980, 312, 16.30 g; and 313, 16.58 g
- 33h. Paris 346, 15.60
- 33i. Seyrig, *Trésors*, 20,4 = Dupriez 90, 12 Dec. 1906, 16; Schlessinger 13, 4 Feb. 1935 (Hermitage), 1211, 15 g
- 33j. J. Hirsch 21, 16 Nov. 1908 (E. F. Weber), 2669, 16.30 g
- 33k. Bourgney, Monnaies, 25 Mar. 1977, 62, 16.94 g; Gadoury (Monte Carlo), 13 Oct. 1980, 311, 16.68 g
- 331. Bank Leu 2, 25 Apr. 1972, 235, 16.30 g
- 53m. Schweizerische Kreditanstalt Monetarium FPL 38, winter 1975, 57
- 53n. Myers FPL 1, Dec. 1972, 63 = Coll. Sartiges, 317
- 53o. Vinchon, 20 May 1959, 538,15.68 g
- 53p. \*BMCTroas, p. 136, no. 7, 15.78 g
- 51q. \*SNGvAulock 1665, 16.75 g
- 54r. Hess Leu 49, 27 Apr. 1971, 202, 16.24 g
- 54s. (?) SNGCopAeolis, pl. 5, 222, 14.76 g (obverse uncertain)
- 55t. \*Bourgey 10 Mar. 1980, 113, 13.62 g

# Issue 30

- 56a. \*Glasgow, Hunter 2, p. 309, 8, 16.26 g
- 56b. Coin Galleries, 17 Apr. 1975, 275, 16.50 g
- 57c. Münzschatze FPL 6, Apr. 1974, 76, 16.65 g
- 57d. \*Kirikhan hd. (ANS photo), 16.41 g; Kölner Münzkabinett 20, 14 Oct. 1976, 36, 16.70 g
- 57e. Paris (de Luynes 2530), 15.98 g 🥄



- 57f. Seyrig, *Trésors* 20, 15 = Schlessinger 13, 4 Feb. 1935 (Hermitage), 1213 = Dupriez 90, 12 Dec. 1906, 25, 16.5 g
- 57g. Kirikhan hd., in trade (Baldwin's) 1982, 16.60 g
- 57h. Schweiz. Bank, winter 1975, 167, 16.82 g
- 57i. Peus 283, 14 May 1974, 123, 16.48 g
- 58b. Vinchon, 17 Dec. 1973, 27
- 58i. Giessener Münzhandlung 17, 4 Nov. 1980, 63, 16.47 g
- 58j. \*Kastner 12, 30 Nov. 1976, 84, 16.55 g; Paris 345, 16.20 g
- 58k. Kirikhan hd. (ANS photo) 16.78 g; Superior Stamp and Coin, 12 June 1975, 64
- 581. McClean 3, 274, n. 15, 15.5 g = Sotheby, 7 Dec. 1896 (Bunbury), 137, 15.5 g

# Issue 31 ME

- 59a. \*Schweizerische Monitarium FPL 31, spring 1980, 55, 16.69 g
- 59b. Schlessinger, 26 Feb. 1934, 288, 16.5 g

#### Issue 32 **№**

- 56a. \*Hess-Leu 28, 5 May 1965, 230, 16.53 g; Ancient Coins, 6 Nov. 1974, 72; Jameson 2237, 16.14 g
- Issue 33 M
  - 56a. \*Kress 158, 8 Nov. 1973, 413

# Issue 34 A

- 56a. \*ANS photofile, "lot 1095" (other cat. info. not preserved)
- 56b. Hunter 2, 309.5, 16.74 g

### Issue 35 TE

- 60a. \*Seyrig, *Trésors* 20, 14 = Bank Leu 7, 9 May, 1973, 214 = H. Frey, 15 Apr. 1955, 1132 = J. Hirsch 33, 17 Nov. 1913, 826 = Dupriez 90, 12 Dec. 1906, 26, 16.43 g; Glendining, 4 Oct. 1957, 146, 16.5 g
- 60b. 's Gravenhage (v. Rede) 15.82 g
- 60c. Numismatica Wein 21, 20 Nov. 1978, 99, 15.08 g
- 60d. Müller 30, 11 Sept. 1980, 157, 16.8 g
- 60e. Bourgey, 4 Mar. 1960, 73, 16.37 g
- 61f. \*SNGvAulock 1662 Glendining, 19 July 1950, 129, 16.62 g
- 62b. \*Munich, 16.18 g
- 62g. Berlin 4 (Löbbecke), 15.35 g

# Two-Braided Issues

#### Issue 36

8a. \*Milano: Gabinetto Numismalico 1, no. 37, 16.95 g (this obverse is tightly-braided)



- 63b. \*J. Schulman 248, 19 Nov. 1968, 159, 16.451 g; Kricheldorf 23, 21 June, 1971, 42
- 64c. \*Spink (Geneva), 10 Oct. 1977, 224, 16.39 g; S. Asia Minor (*IGCH* 1432) =
  C. Boehringer, *Zur Chronologie*, pl. 39, no. 14 = H. M. F. Schulman, 18
  Nov. 1965, 526, 16.82 g; Berlin, 16.445 g
- 65d. \*In trade (Baldwin's, 1981) 16.08 g

  For forgeries of this issue, see the accompanying article by P. Kinns, number 2.

# Issue 37 🛱

- 66a. \*ANS, 16.43 g; Vinchon, 30 Mar. 1981, 42, 16.75 g (obverse 66 is three-braided)
- 67b. \*Vienna 16863, 15.98 g

### Issue 38

- 66a. \*Kirikhan hd. (ANS photo); *SNGvAulock* 1660 = Cahn 60, 2 July 1928, 805, 16.68 g; Bourgey 5 Dec. 1977, 39, 16.83 g
- 66b. ANS (Chapman) 16.53 g
- 66c. ANS, 16.20 g /
- 66d. Kress 158, 8 Nov. 1973, 411
- 67e. \*Egger 45, 12 Nov. 1913, 554, 16.74 g
- 67f. BM, 16.78 g
- 68g. \*Egger 41, 18 Nov. 1912, 546, 15.77 g
- 68h. Brussels (de Hirsch 1478), 16.59 g

#### Issue 39 M

- 66a. Kirikhan hd. (ANS photo) = Bank Leu 13, 29 Apr. 1975, 212, 16.81 g (obverses 66 and 69 are three-braided)
- 66b. \*Kirikhan hd. (ANS photo), 16.80 g; Oxford, 16.56 g; *BMCTroas*, p. 136, no. 13, 16.42 g
- 66c. Kirikhan hd. (CH 1, pl. 10,2); Maringe-Poindessault, June 1980, 126, 16.91 g; Gadoury (Monte Carlo) 13 Oct. 1980, 316, 16.73 g
- 66d. Paris  $353^{92}$  = Glendining, 9 Mar. 1931, 1118, 16.54 g
- 66e. ANS rubbing 2381
- 66f. Hess 249, 13 Nov. 1979, 206, 16.51 g
- 66g. Superior Stamp and Coin, 24 Sept. 1970, 82
- 66h. Münz. u. Med. AG 19, 5 June 1959, 482, 16.33 g; Brandis, 22 May 1922 (Brandis), 450, 16.40 g

92 The ANS has three specimens of the 39.66 type which are clearly casts and are not included in this catalogue. An additional cast is found in Hecht, 26 Apr. 1954, 143. Paris 353 is certainly genuine, because of its fineness of detail. For additional forgeries of this issue, see Kinns, forgery number 1 below.



- 66i. Naville 15, 2 July 1930, 933, 15.54 g
- 66j. Egger 45, 12 Nov. 1913, 555, 16.22 g
- 67k. J. Vinchon, 2 Dec. 1975, 111 = \*Münz. u. Med. AG-Bank Leu, 3 Dec. 1965 (Niggeler), 369 = Münz. u. Med. AG FPL 118, Oct. 1952, 29, 16.70 g; Seyrig, *Trésors* 20,12 = Dupriez 90, 12 Dec. 1906, 15
- 67l. Peus 298, 23 Oct. 1979, 95, 16.73 g
- 68m. \*Bourgey, 11 Mar. 1980, 112, 16.78 g
- 69n. \*Vienna 16869, 16.62 g, /; Dresden 1231, 17.12 g, /; Belloni, Milano: Gabinetto Numismatico 1, no. 38, 17.18 g

### Issue 40 P

- 70a. Auctiones AG (Basel) 4, 26 Nov. 1974, 139; \*BMCTroas, p. 135, no. 1, 16.76 g; Munich, 14.956 g; Hess-Leu, 17 Dec. 1968, 263
- 71a. Hess 207, 1 Dec. 1931, 551 = \*Naville 10, 15 June 1925, 667,16.56 g

# Issue 41 ⊯

71a. \*G. Kastner 4, 27 Nov. 1973, 82, 16.56 g

# Issue 42

- 72a. G. Hirsch 71, 8 Mar. 1971, 201, 16.09 g (obverse 72 is three-braided)
- 72b. \*Münzschatze FPL 10, 1975, 120, 15.491 g; SNGFilzwilliam 4330, 15.29 g
- 73c. \*ANS, 16.10 g
- 74d. Paris (de Luynes 2531), 16.51 g
- 74e. \*Munich (Kirikhan hd.) 15.014 g
- 75f. Boranowsky 4, 25 Feb. 1931, 658 = \*Ratto, 4 Apr. 1927, 1873, 16.22 g
- 76g. \*BMCTroas, p. 136, no. 6, 16.21 g
- 76h. BMCTroas, p. 135, no. 3, 14.72 g
- 76i. Helbing, 24 Oct. 1927, 3055, 16.2 g
- 76j. Superior Stamp and Coin FPL, summer 1981, 37, 16.29 g
- 77k. \*Kirikhan hd. (ANS photo)
- 771. G. Hirsch 75, 22 Nov. 1971, 185, 16.37 g
- 78m. \*Malloy, 28 Mar. 1973, 203
- 79n. \*Kress 151, 23 Nov. 1970, 238, 15.57 g
- 80o. \*Hamburg, Künsthalle (1977), 15.86 g
- 80p. Berlin (Löbbecke), 15.905 g

# Issue 43

- 81a. \*ANS, 14.51 g (obverse 81 is three-braided)
- 81b. Sternberg, 24 Nov. 1977, 111, 16.45 g
- 81c. 's Gravenhage (v. Rede), 16.01 g
- 82d. Münz. u. Med. AG FPL 345, May 1973, 7, 16.75 g



- 82e. \*Auctiones AG (Basel) 3, 4 Dec. 1973, 172, 15.45 g
- 83f. Peus 303, 20 Oct. 1981, 152 = Peus 301, 25 May 1981, 395 = \*Kricheldorf 25, 8 May 1972, 82, 15.06 g

#### Issue 44

84a. \*Kress 166, 1 July 1976, 488

#### Issue 45

- 85a. \*ANS, 16.23 g
- 85b. Oxford, 14.68 g
- 86c. \*ANS, 16.04 g
- 87d. \*SNGAberdeen (Newnham Davis) 256, 15.94 g
- 87e. Berlin, 16.22 g
- 87f. Hess Leu 49, 27 Apr. 1971, 201, 16.59 g
- 88g. Bourgey, 5 Dec. 1932, 217
- 88h. \*BMCTroas, p. 135, no. 2, 16.44 g
- 89f. \*Münz. u. Med. AG FPL 157, May 1956, 15
- 89h. Münz. u. Med. AG FPL 131, Jan. 1954, 37
- 90i. MFA 1652, 13.34 g
- 90j. Sotheby (Zurich) 4 Apr. 1973, 537 = \*Ward Coll. 637, 14.92 g
- 91g. Münz. u. Med. AG FPL 269, Oct. 1966, 22 = Münz. u. Med. 7, 3 Dec. 1948, 472, 15.38 g
- 91k. Superior Stamp and Coin FPL, fall 1980, 59, 16.50 g
- 911. \*Deutsche Bundesbank 578, 15.822 g
- 92c. \*American Auction Assoc. 10 Nov. 1972 (Robert Marks), 1325
- 93l. Munich, 15.484 g
- 93m. G. Hirsch, 82, 13 Feb. 1973, 140, 16.15 g
- 93n. \*Vienna 16865, 16.22
- 940. \*Kölner Münzkabinett 22, 9 Nov. 1977, 62 = Kölner Münzkabinett 7, 22 Apr. 1971, 29, 16.24 g

# Issue 46 ₽

- 95a. Vinchon, 17 Dec. 1973, 28 = Peus 280, 30 Oct. 1972, 167, 15.72 g
- 95b. \*ANS (ETN), 15.75 g; Paris 427 (Armand-Valton), 16.03 g
- 95c. ANS, 15.45 g
- 96d. \*SNGStockholm 209 = J. Hirsch 34, 5 May 1914, 14.97 g; Naville 14, 2 July 1929, 347, 15.35 g
- 97e. \*J. L. Malter 18, 1967, 14, 15.6 g
- 98f. \*Oxford = Sotheby, 3 March 1919 (Butler), 222, 15.64 g; Gallery, 23 Mar. 1971, 46, 15.19 g
- 98g. Paris 344, 15.08 g
- 98h. Myers 9, 5 Dec. 1974, 135, 13.27 g

# Issue 47 ≠

Seyrig, Trésors 18, 12: monogram illustrated but not photographed; not counted in present calculations.



# Issue 48 🕏

Seyrig, *Trésors* 28, 14: monogram illustrated but not photographed; not counted in present calculations.

## Issue 49 $\triangle Y$

Seyrig, Trésors 18, 13: not illustrated and omitted from present calculations. Plated Tetradrachm

\*Oxford (Aleppo 1924), 14.97 g

# **DRACHMS**

## Issue 18 ≰

1a. \*Berlin (Imhoof-Blumer), 3.79 g

## Issue 27 ¥

- 2a. \*Oxford 809 = Naville 4, 17 June 1922, 809 = Weber 5556, 3.84 g; \*Bank Leu 7, 9 May 1973, 215, 3.75 g; \*Paris 358, 3.91 g (Countermark, perhaps of Temnos: see no. 42)
- b. \*Paris 359 (Waddington 1336), 3.36 g

# Issue 39 M

3a. \*BMCTroas, p. 135, no. 4, 3.69 g

# Issue 42

4a. \*BMCTroas, p. 136, no. 5), 3.77 g (countermark of grapes: perhaps of Temnos)



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# ANSMN 30 (1985)

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# MYRINA AND RELATED FORGERIES

(Plates 23-29)

PHILIP KINNS

The handsome hellenistic tetradrachms of Myrina have attracted the unwelcome attention of forgers since the seventeenth century, and at least one new counterfeit has made its appearance since the discovery of the 1972 Kirikhan hoard, which released so many genuine examples onto the market.

The author's original intention was simply to describe and illustrate such false dies of Myrina as could be identified. The present article also exposes modern forgeries of coins of other mints, which can be shown to have emanated from the same workshops.<sup>2</sup>

- 1 Coin Hoards 1 (1975), no. 87A/B. See forgery no. 4 below. Abbreviations used are:
- CAA P. Z. Bedoukian, Coinage of the Artaxiads of Armenia, Royal Numismatic Society Special Publication 10 (London, 1978);
- LSM E. T. Newell, The Late Seleucid Mints in Ake-Ptolemais and Damascus, ANSNNM 84 (New York, 1939);
- SMA E. T. Newell, "The Sciencid Mint of Antioch," American Journal of Numismatics 51 (New York, 1917-18), pp. 1-151.
- <sup>2</sup> The stimulus to this research was given by a discussion with Kenneth Sacks at the ANS in Spring 1982. He brought to my attention the "unwreathed" Myrina tetradrachm in the ANS collection, which had previously been given the benefit of the doubt, but now resides among the forgeries (= no. 7 below). The search for conclusive proofs of the falsity of this otherwise potentially important piece has allowed a number of other forgeries to be placed in context for the first time. For assistance and advice in the preparation of this study I owe special thanks to Kenneth Sacks, Nancy Waggoner and Martin Price, while much of the material would have remained inaccessible without the kind cooperation of Simon Bendall (A. H. Baldwin and Sons Ltd.), Tom Eden (Sotheby Parke Bernet and Co.), and Iain Murray and John Pett (Spink and Son Ltd.).



The forgeries have been divided into three groups: old forgeries (1-2), twentieth-century forgeries (3-6), and the "Baghdad" forgeries (7-42), the last being far the most extensive series. For ease of reference the extant false die combinations have been numbered consecutively in the catalogue that follows. Those which actually resemble tetradrachms of Myrina are nos. 1, 2, 3, 4, 7, 8 and 9, while the remainder are either counterfeits of other issues or complete inventions. The lists of known specimens do not pretend to be complete. Illustrated specimens are marked with an asterisk.

#### **OLD FORGERIES**

# 1. Myrina

- Obv. Head of Apollo r., wearing laurel wreath whose ties float behind; hair rolled above forehead, falling in three braided locks on neck.
- Rev. Apollo standing r., wearing himation; in l. hand, filleted laurel branch, in r., patera; at lower r., amphora and omphalos. To l., reading downward, MYPINAI $\Omega$  [sic], and  $\overline{M}$ . The whole in laurel wreath; tie at base misunderstood.

# AR tetradrachms.

a) Berlin forgeries coll. (= L. Beger, *Thesaurus Brandenbergicus Selectus*, vol. 1, p. 493); \*b) Baldwin's forgeries coll. 18.26 g.

This beautifully executed forgery has the distinction of being one of the relatively few competently struck forgeries of Greek coins which can be traced back to the seventeenth century, for the Berlin example was first published, with a line drawing, in 1696. It was recognized as false by Mionnet<sup>3</sup> and Friedlaender,<sup>4</sup> but no accurate illustration has ever appeared.



<sup>&</sup>lt;sup>3</sup> T. E. Mionnet, Description de médailles antiques grecques et romaines, vol. 3 (Paris, 1808), p. 23, no. 132, but without adequate description.

<sup>&</sup>lt;sup>4</sup> J. Friedlaender, Ein Verzeichniss von griechischen falschen Münzen (Berlin, 1883), p. 40.

The model was a specimen of Sacks's series 39, from one of the three-braided obverses; the actual coin copied may have been Vienna 16869 or Dresden 1231.<sup>5</sup> The most obvious design defects are the incomplete reverse legend MYPINAI $\Omega$  (lacking the final N), and the unsatisfactory base of the laurel wreath.

# 2. Myrina

- Obv. Head of Apollo r., wearing laurel wreath whose ties float behind; hair rolled above forehead, falling in three tightly braided locks on neck.
- Rev. Apollo standing r. on ground line, wearing himation; in l. hand, filleted laurel branch, in r., patera. At lower r., amphora and omphalos (misunderstood). To l., reading downward, MYPINAIΩN, and RE. The whole in laurel wreath.

#### AR tetradrachms.

\*a) BM forgeries coll. (ex R. Payne Knight, Nummi Veteres Civitatum, Regum, Gentium, in Museo R.P.K. Asservati, [London, 1830], p. 136, no. B1); the number 73 (incuse) is stamped on Apollo's neck; 12.96 g; b) BM casts (W. E. Catt; the letter "D" (incuse) is stamped on Apollo's neck); c) Paris forgeries coll. (:= Mionnet, vol. 3, p. 23 no. 133).

This is another highly competent early forgery, already in existence by 1808, when Mionnet published the Paris specimen as "médaillon de coin moderne." These dies represent a very close copy of a Myrina tetradrachm formerly in the d'Este collection at Modena and now in Milan. The relief is lower, and there are noticeable discrepancies in the treatment of Apollo's eye on the obverse and of the wreath on the reverse, but overall the forger's accuracy is remarkable. Specimens a) and b) share the peculiarity of having an incuse number or letter stamped on Apollo's



<sup>&</sup>lt;sup>5</sup> See K. Sacks, "The Wreathed Coins of Acolian Myrina," ANSMN 30 (1985), p. 41, 39.69n; hereafter cited as Sacks.

<sup>&</sup>lt;sup>6</sup> See G. G. Belloni, Musei e Gallerie di Milano: Gabinetto Numismatico, Tomo I (Milan, 1977), p. 23, no. 37 = Sacks, 36.8a.

neck,7 and this tends to confirm the likelihood of an Italian origin. The same incuse "D" has been seen on forgeries of Thurii and "Velia."8

#### TWENTIETH CENTURY FORGERIES

# 3. Myrina

Obv. Head of Apollo r., wearing laurel wreath whose ties float behind; hair rolled above forehead, falling in three braided locks on neck.

Rev. Not seen.

#### AR tetradrachm.

\*a) J. N. Svoronos, Synopsis de Mille Coins Faux du Faussaire C. Christodoulos (Athens, 1922), no. 455, pl. N. (obv. only).

The details of Apollo's hair and laurel wreath are crudely represented in comparison with the original model (e. g. Sacks obverse 32), but the general effect is plausible.

# 4. Myrina

- Obv. Head of Apollo r., wearing laurel wreath whose ties float behind; hair rolled above forehead, falling in three braided locks on neck.
- Rev. Apollo standing r., wearing himation; in l. hand, filleted laurel branch; in r., patera; at lower r., amphora and omphalos; to l., reading downward, MYPINAIΩN, and 🗗 . All in laurel wreath.

#### AR tetradrachms.

a) Sobelar sale 5, 9 Nov. 1974, 473, 16.47 g; b) Sobelar sale 6, 24 May 1975, 590, 17.10 g; c) G. Hirsch sale 95, 5 Dec. 1975, 68, 15.64 g; d) Wendt

<sup>8</sup> Illustrated here as Plate 23, A-B. Both are from Baldwin's forgeries collection.



<sup>&</sup>lt;sup>7</sup> The incuse figures "72," from the same font, appear on the obverse of a false tetradrachm of Cyme, with name ΔHMHTPIO $\Sigma$ , also from the Payne Knight collection. This was originally accepted as genuine and published as *BMCTroas*, p. 112, no. 76 (pl. 21, 6), and it now features in the recent corpus by J. H. Oakley, "The Autonomous Wreathed Tetradrachms of Kyme, Acolis," *ANSMN* 27 (1982), pp. 1–37, as his no. 63a. In fact, however, this piece has long been transferred to the forgeries collection; the obverse die is a very close copy of 63c (in the Paris collection before 1808), but certainly not the same.

sale 13, 9 Nov. 1976, 250, 16.35g; e) Kress sale 175, 21 Sep. 1979, 567; f) Bulletin on Counterfeits, vol. 5 (1980), nos. 1-2, pp. 8-9; 16.43 g; \*g) Vecchi-Schwer sale 1, 13 May 1983, 66 (ex Bonham 7, 29 Mar. 1982, 167), 16.98 g.

No. 4 is the most recent and dangerous of the known forgeries of Myrina, and comes from a Beirut workshop.<sup>9</sup> Both obverse and reverse are excellent copies of genuine dies, the model being a tetradrachm from Sacks series 24, 32; Apollo's eye and expression are not quite correct, but more obvious defects are seen in the treatment of the hair on the crown and the floating upper end of the diadem.

Fortunately the falsity of these dies is confirmed by the use of the same obverse die with a reverse of Alexandria Troas, for such a hybrid (no. 5 below) can hardly be ancient. Forgery no. 6, meanwhile, shows the Alexandria reverse coupled with an obverse of the appropriate type, a head of Apollo to left.

# 5. Myrina / Alexandria Troas (hybrid)

Obv. As 4 (Myrina).

Rev. ΑΠΟΛΛΩΝΟΣ: IMIΘΕΩΣ ΑΛΕΞΑΝ Apollo Smintheus standing r.; in r. field, PΛH (= 163 B.C.); in l. field, Ψ over  $\overline{Ψ}$ .

AR tetradrachm.

\*a) Bullelin on Counterfeils, vol. 8 (1983), nos. 1-2, p. 18, 16.83 g.

#### 6. Alexandria Troas

Obv. Head of Apollo 1., wearing laurel wreath whose ties float behind; hair rolled above forehead, falling in three braided locks on neck.

Rev. As 5.

AR tetradrachm.

\*a) In trade, 1983, 16.73 g.



<sup>&</sup>lt;sup>9</sup> See Bulletin on Counterfeits 5 (1980) pp. 8-9, nos. 1-2. The same Beirut workshop was responsible for several struck forgeries of Seleucid tetradrachms, described and illustrated on pp. 3-5 of the same volume, and for forgeries of wreathed tetradrachms of the Macedonian first region (p. 9, no. 3) and of Cyme (p. 9, no. 1). Three specimens from the last pair of dies have unfortunately been included in Oakley's corpus (above, n. 7), as no. 58a.

These dies represent a close copy of A. R. Bellinger, *Troy: The Coins* (Princeton, 1961), p. 94, A134, but they are condemned by the hybrid with Myrina, listed above as No. 5.

# THE "BAGHDAD" FORGERIES

# 7. Myrina

- Obv. Head of Apollo r., wearing laurel wreath whose ties hang down behind; hair rolled above forehead, falling in three braided locks on neck.
- Rev. Apollo standing r. on ground line, apparently wearing long chiton, rather than usual himation; holds in his l., filleted laurel branch, but the usual patera in his r. appears to be absent; at lower r., amphora and omphalos (?); to l., MYPINAIΩN (downward) and A. Laurel wreath lacking.

#### AR tetradrachm.

\*a) ANS forgeries coll. (ex Kress sale 109, 24 Oct. 1958, 63), 15.30 g.

Prior to Sacks's study of the Myrina tetradrachms this unique piece with unwreathed reverse had been assumed to be genuine. It seemed possible that this was the prototype of the entire series, in which case it would have possessed considerable chronological significance. However, the discovery of the die link with the two coins in the Allotte de la Fuye sale, one of which at 17.95 g was suspiciously overweight, naturally raised doubts as to the authenticity of this group.

In fact, the style, fabric and general appearance of this piece are all unsatisfactory, and it now stands revealed as a crude modern forgery, based on Sacks series 20, but with the reverse type left incomplete. For both this Apollo obverse die, and the wreathed reverse of forgery no. 8 below, are also found in a variety of improbable combinations which cannot be genuine; they will be found catalogued as nos. 10-12.



<sup>10</sup> Listed below as 8b and c.

<sup>11</sup> Note in particular the deep cracks in the flan, which are not paralleled in genuine tetradrachms, and various stylistic deficiencies. On the obverse Apollo's laurel wreath has become a thick braided "rope," and the upper tie of the diadem does not float in the usual way. On the reverse Apollo's garment has been misunderstood, and the entire design is very poorly executed.

# 8. Myrina

Obv. As 7.

Rev. Apollo standing r., wearing himation; in l. hand, filleted laurel branch, in r., patera (?); at lower r., amphora and omphalos; to l. MYPINAIΩN (downward) and A above \*\* All in laurel wreath.

#### AR tetradrachms.

a) BM casts ("from Persia 31/7/1913"); b) Florange & Ciani sale, 17 Feb. 1925 (Allotte de la Fuÿe), 524, 17.20 g; \*c) Florange & Ciani sale, 17 Feb. 1925 (Allotte de la Fuÿe), 525, 17.95 g.

Forgery no. 8, involving the use of a second false reverse with the obverse of no. 7 above, gives a much better overall effect. But the reverse is still of very sketchy execution, in comparison with genuine originals, and it can now be seen that this pair of monograms is an invention by the forger. The high weights of the Allotte de la Fuye specimens should have rendered them suspect from the beginning, but the links with forgeries 7 and 10-12 now condemn them once and for all.

# 9. Myrina

- Obv. Head of Apollo r., wearing laurel wreath whose ties float behind; hair rolled above forehead, falling in three braided locks on neck. (Very similar in style and execution to 7-8 above.)
- Rev. Apollo standing r., wearing himation; in l., filleted laurel branch; in r., patera; at lower r., amphora and omphalos; to l., MYPINAI $\Omega$ N (downward) and A. The whole in laurel wreath. (This may well be the same reverse as 8 above, in an earlier state, before recutting.)

#### A tetradrachm.

\*a) Ball 6, 9 Feb. 1932, 331, 15.5 g.



<sup>12</sup> The upper monogram, as on the reverse of forgery 7, corresponds to that of Sacks series 20, whereas the lower seems to be a simplified version of that distinguishing series 27. For the only genuine tetradrachms with two or more monograms, see Sacks series 30, 37, 42, 43.

These dies are so close in style and execution to those of forgeries 7–8, and so obviously inferior to known genuine dies, that they can hardly be authentic. The model is a tetradrachm from Sacks' series 20, struck from obverse 26. The poor quality of the available illustrations does not permit confirmation of the hypothesis that this reverse is an earlier state of that used for no. 8, but the exact correspondence in, for instance, the details of the wreath seems compelling.<sup>13</sup> Particularly noteworthy is the fact that both here and on reverse 8 the buds immediately above Apollo's head have become detached from the wreath; on genuine dies the stalks can always be made out.

10. Myrina / "Anactorium" (hybrid)

Obv. As 7 above.

Rev. Pegasus flying r.; to r., AAE  $\Xi$ AN $\Delta$ POY (downward); below,  $\blacksquare$  And palm branch.

R

\*a) BM casts ("Mesopotamia 1917").

This hybrid is an absurdity. For the reverse, which makes further appearances in nos. 13 and 17 below, there is no genuine prototype, although the ultimate inspiration was provided by a Corinthian-type stater of Anactorium.

11. Myrina / Arsinoe (hybrid)

Obv. As 7.

Rev. APSINOHS  $\Phi I \Lambda A \Delta E \Lambda \Phi O Y$  Double cornucopiae, filleted, bunch of grapes hanging on each side. Border of dots.

Æ

\*a) Baldwin's forgeries coll. 12.32 g.

This reverse copies that of gold octadrachms of Arsinoe II of Egypt, and forgeries with the correct obverse type may of course exist.



<sup>&</sup>lt;sup>13</sup> For other instances of altered dies and duplicate dies of the same basic type within the "Baghdad" group, see forgeries 32-34 and 41-42 below.

# 12. ? / Myrina (hybrid)

Obv. A curious male bust r., wearing a combination of diademed tiara and crested helmet(?). Fillet border.

Rev. As 8.

Æ

\*a) BM casts ("from Persia 31/7/1913"); b) Note in BM forgeries coll. "Similar specimen found in Mesopotamia 1917"; c) Oxford forgeries coll. 7.88 g.

This strange obverse die, for which no ancient model can be suggested, is also found in three other combinations, listed below as nos. 13, 14 and 16. None looks remotely authentic.

13. ? / "Anactorium" (hybrid)

Obv. As 12.

Rev. As 10.

R

\*a) BM casts ("from Persia 30/7/1913").

14. ? / Antiochus VI (hybrid)

Obv. As 12.

Rev. Dioscuri riding 1.; above, BA $\Sigma$ I $\Lambda$ E $\Omega\Sigma$  ANTIOXOY; below, E $\Pi$ I $\Phi$ ANOY $\Sigma$   $\Delta$ IONY $\Sigma$ OY; in field below, date OP, in r. field, TPY X  $\Sigma$ TA. (This reverse copies SMA, 242, with OP, TPY  $\Sigma$   $\Sigma$ TA.) All in laurel wreath.

Æ

a) BM casts ("from Persia 31/7/1913"); b) Note in BM forgeries coll. "from Mesopotamia 1917, overstruck on a Ptolemaic coin"; c) Brussels forgeries coll. (BM casts); \*d) Baldwin's forgeries coll. (obverse "overstruck" on Nicomedes II of Bithynia), 18.42 g; e) Baldwin's forgeries coll. (obverse "overstruck" on Nicomedes II of Bithynia) 14.98 g; f) Rauch 1., 20 June 1969, 264 (obverse "overstruck" on Myrina).

This reverse die, although crude in execution, could provide a passable imitation of a tetradrachm of Antiochus VI of Syria, but it has not yet been seen in combination with the appropriate obverse type, a diademed radiate head of the young king. The "overstrikes" d-f (and b?) are not



overstrikes on genuine ancient coins. The undertypes are also from false dies and are visible only on the obverses. It is therefore necessary to conclude that each blank was deliberately struck with two different obverses in succession. Although the reverse of specimen f is certainly double-struck, this is not true of d-e, and in their case it seems likely that the first operation, which impressed the blank with the Nicomedes head, used a punch without any design engraved upon it. The Myrina undertype of f appears to be from the same die as forgeries 7, 8, 10, 11, while the Nicomedes head of d-e is identical to that of an egregious forgery which first surfaced about 1890 and has often been taken for genuine. This is included here as 15.

# 15. Nicomedes II of Bithynia

- Obv. Diademed portrait head of Nicomedes II of Bithynia r. Fillet border.
- Rev. BASIAEQS EΠΙΦΑΝΟΥΣ NI KOMHΔΟΣ [sic] Zeus standing l., with wreath and scepter; in l. field, palm branch and eagle l. on thunderbolt; above  $\triangle$  and TP (date).
- AR tetradrachms.

\*a) BM forgeries coll. (Macridy 1890 = NC 1891, pl. 4, 17) 17.10 g; b) Paris (Waddington), 601, 15.55 g; c) Walcher de Molthein 1848a (= Cahn, 25 Feb. 1901, 1848a) 16.85 g; d) Baldwin's forgeries coll. 15.69 g; e) Bourgey, 3 Dec. 1928, 99; f) Bourgey, 14 Dec. 1934, 93

The anomalies involved in these dies are considerable, although they were not originally taken as proofs of falsity. In first publishing this tetradrachm Wroth recognized that the fillet border on the obverse and the palm branch on the reverse were otherwise unparalleled, while the blundered legend NIKOMHΔOΣ and the impossible date TP presented further difficulties. It was later admitted into the *Recueil Général*, when the Waddington and Walcher specimens were also cited; the date was assumed to be in error for PP, although Waddington had previously suggested ΠP to Wroth. The British Museum example



<sup>&</sup>lt;sup>14</sup> W. Wroth, "Greek Coins Acquired by the British Museum in 1890," NC 1891, pp. 117-34; see pp. 130-31, no. 28.

<sup>&</sup>lt;sup>15</sup> W. H. Waddington, E. Babelon and Th. Reinach, Recueil général des monnaies grecques d'Asie Mineure, vol. 1.2 (Paris, 1908), p. 231, pl. 33, 4.

was apparently transferred to the forgeries cabinet early this century because a ticket which seems to belong with this piece reads as follows:

1) "AR coin with same rev. and different obv. die sent from Persia 1906";

2) "This rev. with Mithradates II rev., 1962"; and 3) "An AV coin weight 490.0 (grains = 31.75 g) from same dies offered to Spink by a Smyrniote Greek X/21."

# 16. ? / Tryphon (hybrid)

Obv. As 12.

Rev. Macedonian helmet with ibex horn, surmounted by a small winged figure; to r., BASIΛΕΩΣ (downward); to l., TPY- $\Phi\Omega$ NOΣ (downward); below, YTO KPATOPOΣ (sic). In l. field, X.

#### AR tetradrachm.

a) BM casts ("Mr Shepard of Yale, sent by C. C. Torrey, 1912"); \*b) Baldwin's forgeries coll. (? cast), 16.22 g.

This reverse loosely resembles that of SMA 261, the only tetradrachm of Tryphon with an unwreathed reverse, but is probably a scaled up version of a Tryphon drachm or bronze. There is no authority for the winged figure.

#### 17. "Anactorium"

Obv. Head of Athena I., wearing Corinthian helmet without crest; to r., N and a symbol (?) joined to hair. Border of dots. (Technically this is a "reverse" die.)

Rev. As 10. (Earlier state, without die break at 1.)

Æ

a) Oxford forgeries coll. (ex Ravel) 9.10 g; \*b) Sotheby's "Black Museum," 11.96 g; c) Walcher de Molthein 1341 ( - Cahn, 25 Feb. 1901, 1341), 9.44 g.

This fantasy purports to be a stater of Anactorium, and the Walcher specimen was published as such. It was, however, withdrawn from the sale in 1901.

16 I.e. a hybrid combining this reverse with the *reverse* of forgeries 32-34 below. A ticket in the Parthian tray confirms the link.



# 18. Alexander Balas / Antiochus VI (hybrid)

Obv. Diademed portrait head of Alexander Balas r. Border of dots. Rev. As 14.

AR tetradrachm.

\*a) Spink's forgeries coll., 13.12 g.

Through this improbable hybrid the chain of false dies formed by 7-17 above can be extended to include two fairly convincing Seleucid forgeries (20-21 below), both of which have previously been accepted as genuine.

19. Alexander Balas / Seleucus IV (hybrid)

Obv. As 18.

Rev. BAΣΙΛΕΩΣ ΣΕΛΕΥΚΟΥ Apollo seated 1. on omphalos, in r. hand, arrow, in l., bow; above and below, thunderbolts; in l. field, 🗠 and laurel branch, in r. field, H.

AR tetradrachm.

\*a) BM forgeries coll. (Wilkinson, 1912 = NC 1913, pp. 272-73, pl. 13. 14), 15.11 g.

G. F. Hill's original publication of this coin, while describing it (wrongly) as plated, did not question its authenticity.<sup>17</sup> He believed that it represented the transition between two known classes of Seleucus IV tetradrachms in these basic types. Yet with hindsight his acceptance of the piece seems rather surprising, for he concluded his description with the following sentences: "A few days after the above was written, I was shown in a private collection formed in Persia a tetradrachm of Seleucus IV, with an obverse of the more usual kind, and a reverse exactly similar to the present one.<sup>18</sup> But the coin was distinctly suspect, being either struck from false dies (of which the reverse may have been made from one similar to our own) or else a very good cast."

At some date after 1913 this piece was transferred to the forgeries collection, a decision amply confirmed by the existence of 7-18 above and 20-21 below.



<sup>17 &</sup>quot;Greek Coins Acquired by the British Museum," NC 1913, pp. 272-73.

<sup>18</sup> See forgery no. 21 below.

#### 20. Alexander Balas

Obv. As 18.

Rev. Zeus Nicephorus seated l.; at r., downward, BASIΛΕΩΣ; at l., (downward), AΛΕ ΞΑΝΔΡΟ (?) ΕΟΠΑΤΟΡΟΣ (?), flanked by  $\Gamma$  and  $\Lambda$ ; in exergue, date  $\Delta$  ΞΡ.

#### AR tetradrachm.

\*a) Walcher de Molthein 2965 (= Cahn, 25 Feb. 1901, 2965), 16.85 g.

Forgery 20 couples the head of 18-19 above with a more appropriate reverse, similar to SMA 142-44 (with the same date but different monograms). In fact, of course, all genuine reverses of this type read BA- $\Sigma I \Lambda E \Omega \Sigma$  A  $\Lambda E \Xi A N \Delta P O Y \Theta E O \Pi A T O P O \Sigma EYEP FETOY, and the omission of the second title would be remarkable. Nevertheless, this is a forgery which could deceive when seen in isolation.$ 

#### 21. Seleucus IV

Obv. Diademed portrait head of Seleucus IV r. Fillet border. Rev. As 19.

AR tetradrachm.

\*a) Hess sale 207, 1 Dec. 1931, 654, 16.04 g.

Like the previous forgery of Alexander Balas, no. 21 could only be condemned once the connection with no. 19, and therefore 7-20, had been established. Alone it might stand as a unique variant among the tetradrachms of Seleucus IV.

With the possible exception of no. 9, forgeries 7-21 therefore form a continuous die linked sequence. Known provenances suggest that the group was produced in Persia or Mesopotamia (present day Iraq) between 1890, when no. 15 was first noted, and 1912-13. A variety of characteristics associate these pieces with a further series of forgeries (22-42 below), some of which were acquired in Baghdad<sup>19</sup> and, in the absence of any more specific indication, it will be convenient to refer to the ensemble as "the Baghdad forgeries."

The first sightings of the coins in this second group, where recorded, cover the same general period, 1889–1913, as the first group. This is



<sup>19</sup> Baghdad provenances are recorded for forgeries 23, 31, 34, 38 and 41.

suggestive, but the common origin of 7-21 and 22-42 would appear to be confirmed by a reported die link; a hybrid combining the reverse of 15 above (Nicomedes II) with the reverse of Mithradates II (forgeries 32-34 below) was shown at the British Museum in 1962.<sup>20</sup>

Further objective corroboration is provided by the fact that within 22-42 we find further attempts, of identical style and fabric, at the same types as were imitated in 7-21; the reverses of 14 and 18 (Antiochus VI) and 16 (Tryphon) can hardly be separated from their counterparts in 22 and 23, and 24-27 below.

The second group, however, does not form such a tight sequence as the first, although there are several die links,<sup>21</sup> and it is therefore necessary to demonstrate its unity. The arguments may be summarized as follows:

- 1) Fabric. The reverse fields are often very flat, while the obverses are noticeably convex. This applies equally to 7-21 and 22-42. Double-striking is endemic.
- 2) Style. The sketchy style, especially of the human figures on the reverses, and untidy lettering suggest a common source.
- 3) Spelling. There are a number of blundered legends, as a result of unintelligent copying of badly preserved models. Note YTO KPATO-POS (24 27), ASIAEOS (25-26), MYSHS (36-37), BASIAISHS (36-37 and 41-42), MENASKPOY (41-42). These may be compared with NIKOMH $\Delta$ OS (15), YTO KPATOPOS (16) and EOTIATOPOS (20) in the first group.
- 4) Metal. Many of the dies were struck in lead alloy (23, 34, 38, 41) and/or gold (30, 38, 41, 42), as well as silver.<sup>22</sup> It was noted above that 15 had also been seen in gold.
- 5) Patina. Some characteristic false patinas have been noted within 22-42: 22a, 29e, 31a, 34c, 41f, i, 42a, all have a thin, brownish patination, which may be a varnish of some kind. By contrast: 23d, 24b, 28a,b, 29f, g, 31b, 38 g, h, 39c, 41g, all of which are noticeably overweight and have a thick but patchy purple and green coating. Clearly these false dies were in use over a period, and the products of separate "runs" might differ considerably in appearance.



<sup>&</sup>lt;sup>20</sup> See above, p. 54, with n. 16.

<sup>21</sup> See forgeries 22–23, 25–26, 29–30, 32–34, 35–37, 39–42.

<sup>&</sup>lt;sup>22</sup> No. 40 (a hybrid) has been seen only in lead.

6) Provenance. Just as 8, 12, 13, 14 and later 10, 12, 14 turned up in groups at the British Museum, again in the second series we see specimens surfacing together. Forgeries 23, 31, 34, 38, 41 were shown at the British Museum in 1912 with the provenance Baghdad. Examples of 23 and 29 were both in the collection of Allotte de la Fuye, 23 along with two specimens of 8 above, while several feature in the Walcher de Molthein collection, published in 1895.24

#### 22. Antiochus VI

Obv. Diademed and radiate head of Antiochus VI r. Fillet border. Rev. BAΣIΛΕΩΣ ANTIOXOY ΕΠΙΦΑΝΟΥΣ ΔΙΟΝΥΣΟΥ Dioscuri riding l.; in r. field, TPY KP ΣΤΑ; below, ΘΕΡ. All in laurel wreath.

#### A tetradrachms.

\*a) Baldwin's forgeries coll., 15.36 g; b) J. Schulman sale, 26 Nov. 1913, 2572, 15.1 g; c) Helbing sale, 31 Jan. 1930, 332, 16.4 g.

#### 23. Antiochus VI

Obv. Diademed and radiate head of Antiochus VI, r. Fillet border. (Very similar to 22 above.)

Rev. As 22.

AR tetradrachms (b, d, e) and lead (a? and c).

a) BM casts ("from Baghdad 1912"); b) BM casts ("Roupen Aug. 1926"), 16.99 g; c) Baldwin's forgeries coll., 15.69 g; \*d) Sotheby's "Black Museum" 19.10 g; e) Florange & Ciani, 17 Feb. 1925 (Allotte de la Fuÿe), 871, 16.75 g.

Nos. 22 and 23 are plausible but crude copies of tetradrachms of Antiochus VI of 144/3 B.C. SMA 228-34 provide no exact parallel for the control marks.



<sup>23</sup> He played an important role in the early twentieth century excavations at Susa.

<sup>&</sup>lt;sup>24</sup> See nos. 15c, 17c, 20a above, and 24c below. References are to U. von Remer, Catalogue de la collection de médailles grecques de Walcher de Molthein (Paris, 1895).

# 24. "Tryphon"

Obv. Young male head diademed r. Fillet border.

Rev. Spiked Macedonian helmet with ibex horn, at r., BAΣIΛΕΩΣ ΤΡΥΦΩΝΟΣ (downward); at l., YTO KPATOPOΣ (downward); in l. field, X. No wreath.

#### A tetradrachms.

\*a) BM forgeries coll., 16.51 g; b) Sotheby's "Black Museum," 19.15 g; c) Walcher de Molthein 3014 (= Cahn, 25 Feb. 1901, 3014 -- "Aechtheit zweifelhaft": withdrawn) 15.57 g.

This reverse is clearly related to 16 above. Although it is of much better execution, the absence of wreath, the presence of X in the field, and above all the spelling YTO KPATOPOS must indicate a common origin. The head on the obverse bears little resemblance to genuine portraits of Tryphon.

# 25. "Tryphon"

Obv. Young male head diademed r. Fillet border.

Rev. Spiked Macedonian helmet with ibex horn; at r.,  $A\Sigma I \wedge E\Omega \Sigma$  TPY $\Phi\Omega NO\Sigma$  (downward); at l., YTO KPATOPO[ $\Sigma$ ], (downward); in l. field,  $\mathfrak{m}$ . No wreath.

#### AR tetradrachm.

\*a) Sotheby's "Black Museum," 16.39 g.

# 26. "Tryphon"

Obv. Young male head diademed r. Fillet border.

Rev. As 25.

AR tetradrachm.

\*a) Baldwin's forgeries coll., 16.61 g.

The die linked forgeries 25 and 26 are even less convincing imitations of tetradrachms of Tryphon. The control mark would seem to be inspired by SMA 267, a drachm with  $\hbar$ . Once again the reverse die is unwreathed, and YTOKPATOPOS is joined by ASIAEOS. The forger was evidently no great scholar.



# 27. "Arsaces" / Tryphon (hybrid)

- Obv. ΒΑΣΙΛΕΩΣ ΑΡΣΑΚΟΥ Bearded nude male figure standing l. on ground line, in l., uncertain object; in l. field, ★ (?); in exergue, ΛΟΡ. (This is actually a reverse die.)
- Rev. Spiked Macedonian helmet with ibex horn. To r., BAΣIΛΕΩΣ ΤΡΥΦΩΝΟΣ (downward); to l., [?] ΥΤΟ ΚΡΑΤΟΡΟΣ; in l. field, X. No wreath. (Very similar to 24 above.)

Æ.

\*a) Spink's forgeries coll.

This is an absurd hybrid combining two unrelated reverse dies, of which the Tryphon die is all but identical to the reverse of 24 above. Although this particular piece could deceive no one, the dies are worth recording in case one or the other should turn up coupled with a more appropriate obverse type.

## 28. Demetrius II

- Obv. Bearded and diademed portrait head of Demetrius II r. Fillet border.
- Rev. Zeus Nicephorus seated I.; to I., BAΣIΛΕΩΣ ΔΗΜΗΤΡΙΟΥ (downward); to r., ΘΕΟΥ ΝΙΚΑΤΟΡΟΣ (downward); in exergue,  $\bowtie$  and  $\bowtie$  below throne, small vertical club (?).
- A tetradrachms.
  - a) Sotheby's "Black Museum," 21.42 g; b) Sotheby's "Black Museum," 18.73 g.

This is a reasonably competent forgery of a second reign tetradrachm of Demetrius II betrayed by the excessive weights of the two recorded specimens. The prototype is LSM, p. 5, no. 4 (Ake-Ptolemais, 127/6 B.C.), but there is no authority for the "club" below the throne. It may simply be an extra support.

#### 29. Tigranes

Obv. Portrait head of Tigranes II of Armenia r., wearing royal tiara decorated with two eagles and star on upper part and small star to l. of ear. Fillet border.



Rev. BASIAEQS TIPPANOY Tyche of Antioch seated r., holding palm; at feet, river god Orontos swimming r.; on rock, S; in r. field,  $\triangle$ . All in laurel wreath.

#### AR tetradrachms.

a) P. Z. Bedoukian Coll. = CAA, p. 52, no. 27, 15.62 g; b) N. Kapamadji (ex Florange & Ciani, 17 Feb. 1925 [Allotte de la Fuÿe], 963) = CAA, p. 52, no. 27; S. Boutin, Collection N.K. Monnaies des Empires de Byzance (Wetteren, 1983), p. 155, 1109, 15.10 g; c) BM forgeries coll. (L. A. Lawrence pres., 1896) 15.60 g; d) BM forgeries coll., 14.87 g; \*e) Baldwin's forgeries coll., 16.25 g; f) Sotheby's "Black Museum," 18.96 g; g) Sotheby's "Black Museum," 18.60 g; h) Spink's forgeries coll., 15.20 g.

#### 30. Tigranes

Obv. As 29.

Rev. BASIAEQS TIPPANOY Tyche of Antioch seated r., wearing royal tiara of Armenia instead of mural crown; he holds by hair head of river god Orontes, who swims below, decapitated; rock incorporates stool; on rock,  $\Sigma$ . All in laurel wreath.

#### AR tetradrachms (a, c) and A (b).

a) Venice, Mekhitarist Museum (= CAA, p. 49, no. 16) 14.8 g; b) Etchmiadzin Monastery, Armenian S.S.R. (= Bedoukian, ANSMN 11 [1964], p. 304, 1), 4.80 g; \*c) BM forgeries coll. (Spink pres., 1953), 14.74 g.

Specimens 29a and b and 30a have previously been accepted as genuine, although Bedoukian and others have entertained doubts about the authenticity of the last piece, with its bizarre reverse type. <sup>25</sup> But the obverse die link between 29 and 30 does not appear to have been noticed, although Bedoukian illustrates both on plate 2 of his book. As for 30b, the gold specimen in Armenia, Bedoukian condemned it as a cast in 1964, <sup>26</sup> without fully appreciating the extraordinary design of the re-



<sup>&</sup>lt;sup>25</sup> See P. Z. Bedoukian, CAA, p. 49, no. 16; Haji Toros (pseudonym of P. Carnig, "Tigran's Fantasy," SAN 1, 4 (1970), pp. 68-69, 73; Haji Toros, "Tigran's Fantasy Enhanced," Armenian NJ 4 (1978), pp. 125-29. See also n. 30 below.

<sup>&</sup>lt;sup>28</sup> P. Z. Bedoukian, "Gold Forgeries of Tigranes the Great of Armenia," ANSMN 11 (1964), pp. 303-6. The Etchmiadzin piece first surfaced as an ornament on the watch chain of Muzzafar ed-Din, Shah of Persia 1896-1906.

verse, or the extent of its similarity to 30a, in Venice. These points were subsequently brought home by Haji Toros,<sup>27</sup> who thought it a struck piece, and sought to argue for its genuineness.

In 1978 Bedoukian confessed himself unable to explain the reverse type of  $30a,^{26}$  but Haji Toros had already provided a fanciful historical context for it.<sup>29</sup> The latter author had also proposed that the letter  $\Sigma$  on both our reverses was the mint mark of Seleuceia-on-the-Tigris,<sup>30</sup> an attribution which can now be discarded.

The fact is that 29 and 30 are unquestionably modern forgeries. The style of the obverse, where Tigranes appears as a young man, is unlike that of any known genuine die, and the star to the left of Tigranes's ear is otherwise unattested. The fabric and general appearance of many of these pieces (especially 29c-e and 30c) are so similar to those of the false tetradrachms of Mithradates II of Parthia (32–34 below) that a common origin is assured, and they readily take their place among the "Baghdad" forgeries. Above all, the existence of grossly overweight specimens 29f, g and of a gold striking of 30 (with meaningless weight and implausible fabric) utterly precludes any possibility of these being genuine ancient coins. In these circumstances the reverse type of 30 can only represent an amusing whim on the part of the forger, for which no explanation need be sought. The fact that the stool does not entirely supplant the rock shows that the designer did not think very hard about his subject.

#### 31. Seleuceia Pieria

Obv. Veiled and turreted bust of Tyche r. Fillet border.

Rev. Filleted thunderbolt on cushioned stool; above,  $\Sigma E \wedge EY - KE\Omega N$  TH $\Sigma$  IEPA $\Sigma$ ; below, KAI AYTONOMOY; between legs of stool,  $\Gamma I$  (= year 13, i.e. 97/6 B.C.); in r. field,  $\uparrow$ . All in laurel wreath.



<sup>&</sup>lt;sup>27</sup> Toros, Armenian NJ (above, n. 25), pp. 125–29.

<sup>28</sup> Bedoukian, CAA, p. 49.

<sup>&</sup>lt;sup>29</sup> Toros, SAN (above, n. 25), pp. 68-69, 73 (modified in Armenian NJ 4, pp. 125-29).

<sup>&</sup>lt;sup>30</sup> Haji Toros, "Tigran's Tetradrachms," SAN 2, 1 (July 1970), pp. 5–8; he tentatively associates his IXA (= forgery 30) and IXB (= forgery 29) on the basis of the letter  $\Sigma$ , but does not recognize the shared obverse die. On p. 8 he raises doubts as to the authenticity of IXB, without realizing the implications for IXA.

#### A tetradrachms.

\*a) Baldwin's forgeries coll., 16.59 g; b) Sotheby's "Black Museum," 18.16 g; c) Sotheby's photo (shown 1974).

This is really rather a good copy of BMCGalatia, p. 271, no. 21 (with  $\Gamma l$ ,  $\triangle$ ), but the weights are far too high. A tetradrachm of Seleuceia Pieria was amongst the forgeries from Baghdad shown at the British Museum in 1912, but no casts were taken. It may be assumed to have been a specimen from these dies.

#### 32. Mithradates II of Parthia

Obv. Diademed portrait bust of Mithradates II l. Border of dots.

Rev. BAΣΙΛΕΩΣ ΜΕΓΑΛΟΥ ΑΡΣΑΚΟΥ ΕΠΙΦΑΝΟΥΣ Archer seated right; in r. field, branch.

#### AR tetradrachm.

\*a) Naville 1, 4 Apr. 1921 (Pozzi), 3105 (ex. J. Hirsch 21, 16 Nov. 1908 [E. F. Weber], 4346), 15.51 g.

#### 33. Mithradates II of Parthia

Obv. Diademed portrait bust of Mithradates II l. Border of dots. (Very similar to 32 above.)

Rev. As 32.

#### AR tetradrachms.

\*a) BM forgeries coll. (Cunningham 1894), 14.88 g; b) Naville 12, 18 Oct. 1926, 2138, 14.95 g; c) Berichte 36 (Dec. 1966), p. 145, no. 94.

#### 34. Mithradates II of Parthia

Obv. Diademed portrait bust of Mithradates II l. Border of dots. (Very similar to 32 and 33 above.)

Rev. As 32, but  $|\Lambda|$  in exergue on f and g.

AR tetradrachms (a, c-g) and lead (b).

a) BM forgeries coll. 15.70 g; b) BM casts ("Baghdad 1912"); \*c) Baldwin's forgeries coll. 17.11 g; d) Spink's forgeries coll. 14.44 g; e) Myers 1, 18 Nov. 1971, 310; f) BM forgeries coll. (in exergue, |Λ), 15.73 g; g) BM forgeries coll. (in exergue, |Λ), 15.71 g.



Nos. 32-34, linked by a common reverse die, are deceptive forgeries of a tetradrachm of Mithradates II of Parthia.<sup>31</sup> On all three obverses the torque around the neck has been misunderstood, for it appears as a single band, instead of the three spirals shown on genuine dies. The falsity of 32-34 is proved by the excessive weight of 34c, at 17.11 g, and by the remarkable similarities in fabric and general appearance between these pieces and the forgeries of Tigranes (29-30 above) and of Kamnaskires and Anzaze (40-42 below); the latter are die linked to a further Parthian production (39) which has no genuine prototype. Final confirmation comes from the fact that a hybrid coupling this reverse of Mithradates with the reverse of 15 above (Nicomedes II of Bithynia) was shown at the British Museum in 1962.<sup>32</sup>

#### 35. "Parthian King"

Obv. Bearded bust of Parthian king 1., wearing tiara ornamented with star; foreparts of stags around crest. (The intended model is not closely identifiable.)

Rev. BASIΛΕΩΣ APSAKOY Archer enthroned r., holding bow; above, star, to outer r., eagle on thunderbolt above  $\triangle$  (?).

AR tetradrachm.

\*a) BM forgeries coll. 14.96 g.

36. "Parthian King" / Musa (Hybrid)

Obv. As 35.

Rev. Around, MYZHZ BAZIAIZHZ  $\odot$  EAZ OYPANIAZ Portrait bust of Queen Musa 1.; in inner 1. field,  $|\Delta|$  (?).

AR tetradrachm.

\*a) BM casts ("W. M. Ramsay, from Asia Minor").



<sup>31</sup> For the prototype, see D. G. Sellwood, An Introduction to the Coinage of Parthia, 2nd ed. (London, 1980), p. 67, no. 24.3.

<sup>32</sup> See above, p. 54, with n. 16.

#### 37. Phraataces and Musa

Obv. Portrait bust of Phraataces I.; wreath-bearing Nike on either side of head.

Rev. As 36.

AR tetradrachm.

\*a) BM photo (shown 1977), 15.51 g.

Nos. 35 and 37 are simultaneously connected and condemned by the impossible hybrid no. 36, and the fabric, style and general conception of 35 are sufficient to show that it belongs with the rest of the "Baghdad" forgeries. There is no obvious genuine prototype for 35, but the antecedents of 37 provide further proofs of its origin. Although tetradrachms of Phraataces and Musa are well known, the model for our forgery is clearly a drachm, which has been "scaled up." The true legend reads  $\Theta EAL OVPANIAL MOVLHL BALINILLHL, and the second spelling error on the false die <math>(BASINISHS)$  exactly parallels that seen on forgeries 41-42 below.

#### 38. "Vonones"

- Obv. Diademed bust of a Parthian king l., wearing winged tiara; to r., crescent. Border of dots.
- Rev.  $BA\Sigma I \Lambda E\Omega\Sigma$  AP $\Sigma AP\Sigma A$  KOY Nike standing r., holding palm branch; above, star, to r.,  $\overline{A}$ .
- AR tetradrachms (a-c, e, g-i), A (f) and lead (d).
  - a) BM forgeries coll. (Peddie, 1889), 15.88 g; b) BM casts ("sent by Mr Bleasby, May 1904");<sup>34</sup> c) BM casts ("Lambros Oct. 1907"); d) BM casts ("Bagdad 1912"), 11.69 g; e) Note in BM forgeries coll., 17.69 g; f) Note



<sup>33</sup> For the tetradrachms, in rather different types, see Sellwood (above, n. 31), pp. 189-90, no. 58.1-8. The model for forgery 37 is the drachm no. 58.9.

<sup>&</sup>lt;sup>34</sup> The ticket belonging to this pair of casts reads "no doubt from Chanda Mall and Lakhmi Dass." J. E. Cribb of the British Museum advises me that Mr. Bleasby was a specialist in Indian coinage, and that these gentlemen were dealers operating in the Northwest Frontier Province of India. But this suggestion of an Indian source for the "Baghdad" forgeries is overruled by the much larger number of certain Mesopotamian and Persian provenances. Most of the types imitated would have been familiar in Mesopotamia, but certainly not in India.

in BM forgeries coll., "seen in gold, Aug. 1972"; g) Sotheby's "Black Museum," 22.04 g; h) Sotheby's "Black Museum," 19.49 g; \*i) D. G. Sellwood coll.

Both the range of weights and the variety of metals in which these dies have been struck leave no doubt that they are false. The types would appear to have been inspired by drachnis of Vonones I,35 but the obverse has a Sasanian look.

#### 39. "Mithradates I" of Parthia

Obv. Diademed bust of Mithradates I l., wearing bashlyk; over ear, meaningless pattern / monogram.

Rev.  $BA\Sigma I \Lambda E\Omega\Sigma$  ME  $\Gamma A \Lambda OY$  APSA KOY Archer seated r.

AR tetradrachms.

a) BM forgeries coll., 16.00 g; \*b) BM forgeries coll., 15.88 g; c) Sotheby's "Black Museum," 18.37 g.

This forgery, like nos. 37 and 38 above, presents another instance of the "scaling up" of a genuine drachm type.<sup>36</sup> No. 40 couples this reverse with an obverse of Kamnaskires and Anzaze of Elymais — a somewhat improbable combination.

40. Kamnaskires and Anzaze | "Mithradates I" (hybrid)

Obv. Jugate busts of Kamnaskires and Anzaze of Elymais Rev. As 39.

Lead.

\*a) BM forgeries coll. (A. P. Ready, 1919), 15.27 g.

#### 41. Kamnaskires and Anzaze of Elymais

Obv. As 40, but earlier state (specimens a-h). Specimen i is from the later state, as 40.

Rev. BASIΛΕΩΣ MENASKPOY [sic] BASIΛΙΣΗΣ [sic] ANZAZHΣ. Zeus Nicephorus seated l.; in l. field, meaningless pattern (replacing letters on genuine dies) and bird r.; in exergue, date  $\Lambda \Sigma$ .



<sup>35</sup> See Sellwood (above, n. 31), pp. 194-95, no. 60.1-7.

<sup>36</sup> For the prototype see Sellwood (above, n. 31), p. 34, no. 10.1.

- At tetradrachms (a, c, e-i), A (d) and lead (b).
  - a) BM casts ("1905"); b) BM casts ("Bagdad 1912"); c) BM casts, 16.5 g; d) BM photo obv. only (shown 1983), 32.00 g; e) Paris (note in BM forgeries coll); \*f) Baldwin's forgeries coll., 14.29 g; g) Sotheby's "Black Museum," 18.82 g; h) Naville 12, 18 Oct. 1926, 2527, 15.06 g; \*i) Spink's forgeries coll., 22.52 g.

#### 42. Kamnaskires and Anzaze of Elymais

Obv. Jugate busts of Kamnaskires and Anzaze l. Very similar to 40 above, but Anzaze wears a necklace, and Kamnaskires's diadem hangs differently.

Rev. Same as 41 above, but in an earlier state, without bird at l.  $\mathbb{R}$  tetradrachm (a) and  $\mathbb{N}$ ? (b?).

\*a) BM forgeries coll. (H. D. McEwen, Dec. 1915), 16.54 g; ?b) Note in BM forgeries coll. re 41: "A coin with similar obv. seen in gold, July 1909."

Nos. 41 and 42, linked to forgery 39 through hybrid 40, are imitations of genuine tetradrachms such as BMCArabia, pp. 245–46, nos. 1–3. The legend should read BACINEQE KAMNACKIPOY KAI BACINECHE ANZAZHE, and the only recorded date is ANS (as BMC 1). The bird in the left field on the reverse of 41 appears to be a gratuitous addition by the forger.

It is probable that 41 and 42 were already in existence by 1901, for in an article dated January 1902 Allotte de la Fuÿe referred to "les nombreux exemplaires faux qui m'ont été présentés," without giving any further details.<sup>37</sup>

<sup>37</sup> See F. M. Allotte de la Fuÿe, "La dynastie des Kamnaskirès," RN 1902, pp. 92–114; the quoted remark is on p. 100.



# TWO NOTES ON THE AESILLAS TETRADRACHMS: MINT ATTRIBUTION AND A DIE CONTROL SYSTEM

(PLATES 30-31)

ROGER S. FISHER

During the first decades of the first century B.C., a series of silver tetradrachms was struck in the Roman province of Macedonia.<sup>1</sup> The iconography is the same on all the coins: on the obverse a portrait of Alexander the Great facing right; on the reverse an olive wreath,<sup>2</sup> a quaestorial cista in the left field, a quaestorial sella in the right field, and a club of Heracles pointing down dividing these two fields. All the coins have the Greek ethnic MAKE $\Delta$ ON $\Omega$ N on the obverse.<sup>3</sup> Despite this uniformity, however, the coins fall into three recognizable issues on the basis of their obverse and reverse Latin legends:<sup>4</sup>

- <sup>1</sup> I would like to thank the American Numismatic Society for introducing me to the study of numismatics through their 1981 Graduate Seminar. The staff of the ANS have been very helpful in all stages of my research but I should mention in particular Nancy Waggoner for first suggesting that I study the Aesillas coinage and providing the necessary guidance and encouragement. I must also thank T. V. Buttrey who provided detailed and valuable criticisms.
- <sup>2</sup> Earlier publications and handbooks describe this as a laurel wreath but the wreath is more likely an olive wreath. Laurel branches are characterized by alternate leaves and small clustered berries, olive branches by opposite leaves and a larger fruit or berry. For the differences between the two types of plant, see L. H. Bailey, The Standard Cyclopedia of Horticulture (New York, 1928).
- <sup>3</sup> R23 is unique. It has the *sella* on the left and the *cisla* on the right. Its obverse die, O11, does not seem to have had the Greek ethnic or any control marks.
- <sup>4</sup> The issues are listed here in their conventional order. I cannot verify Gaebler's assertion that AESILLAS and SUURA are die linked: "Ein im Besitz des Herrn E. Bruening (Berlin) befindliches Tetradrachmon mit stempelgleicher Vf., aber AESILLAS



#### TABLE 1

#### Obverse and Reverse Latin Legends

Obverse	Reverse
1. CAE PR	AESILLAS Q
2.	AESILLAS Q
3.	SUURA LEG PRO Q

In addition to the ethnic and the Latin legends, die marks appear on some of the tetradrachms. These die marks, which consist of monograms, single letters and pellets,<sup>5</sup> appear on either the obverse or the reverse of the coins.

auf der Rf. beweist nun, dass Sura als unmittelbarer Nachfolger des Aesillas die Quaes tur in Makedonien verwaltete..." (ZfN 1902, p. 171). F. Imhoof-Blumer claims that AESILLAS overstruck SUURA: "Un exemplaire au nom d'Aesillas, dans le collection de M. Six, est surfrappé sur un tetradrachme de Sura, à ce qu'il paraît." (MonnGr, p. 60, n. 3). The last statement does not seem to be very convincing and I might point out that if AESILLAS overstruck on a coin of SUURA, the conventional sequence of issues must be wrong. SUURA was once universally regarded as Q. Brettius Sura, the legate of C. Sentius Saturninus in Greece and Macedonia from 93 B.C. to 87 B.C. See T. R. S. Broughton, The Magistrates of the Roman Republic (Cleveland, Ohio, 1925), p. 15; hereafter cited as MRR. There is no known magistrate of this name associated with the province after 87 B.C. although D. M. Lewis equates our Suura with P. Lentulus Sura, consul in 71 B.C. and one of the Catilinarian conspirators (NC 1962, p. 298.). Aesillas the quaestor is completely unknown. From his name it has been suggested that he is a novus homo from Etruria or Ancona (T. P. Wiseman, New Men in the Roman Senate [Oxford, 1971], p. 209). The legend CAE has usually been regarded as an abbreviation for CAE(SAR). An L. Julius Caesar was governor of Macedonia in the 90s B.C. (MRR, p. 13). A second L. Julius Caesar was practor in 67 B.C. and consul in 64 B.C. (MRR, pp. 113 and 161). Both of these men could be the magistrate identified as CAE PR on the tetradrachms depending on which chronology is adopted. That CAE stands for CAE(SAR), therefore, is not even certain. Note that the usual epigraphical abbreviation for CAESAR is CAES(AR).

<sup>5</sup> The widespread distribution of the pellets on these tetradrachms and their apparent use as part of a control system was noted by this author in his ANS Seminar paper of 1981. See also, O. Morkholm, "The Chronology of the New Style Coinage of Athens," ANSMN 29 (1984), p. 37.



Obverse die marks:  $\Theta \Theta \Theta \Theta \circ S^{\bullet}$  Seven obverse dies have no die mark. Only one of these marks appears per die, except  $S^{\bullet}$  which always appears with  $\Theta$ .  $\Theta \cap \Theta$  and  $\Theta \cap \Theta$  are found to the left of the portrait while  $\Theta \cap \Theta$  are only found on the right below the chin.

Reverse die marks: more than two-thirds of the reverse dies have no die marks. A faint  $\beta$  is found on two dies below the knot in the bottom of the wreath; on some dies one, two or three pellets are found in several different positions on the die (usually between the legs of the sella or below the cista, sometimes below the knot of the wreath or, in a few instances, in other locations), while on other dies A or A appears in the top of the wreath.

The obverse and reverse die marks are confined to the AESILLAS issue 2 except for obverse  $\Theta$  and obverse  $S^{\bullet}l^{\bullet}$ . In the following sections it will be shown that the nineteenth century mint attributions based solely on the obverse letters must be reconsidered and that the obverse and reverse die marks found on the tetradrachms issued by AESILLAS issue 2 are part of a die control system.

#### MINT ATTRIBUTION

In the absence of any historical evidence for the location of the mint (or mints) in the Roman province of Macedonia, and in the absence of any explicit evidence from the coins themselves, numismatists have had to rely on argument from analogy in attributing the tetradrachms to their mints. By 1900 numismatists were unanimous in the belief that the obverse die marks, except S°I°, were mint designations, that is, letters as abbreviations for the names of the mints or cities where the coins were struck.<sup>8</sup> The mint attributions made by the nineteenth



<sup>&</sup>lt;sup>6</sup> This die mark has been interpreted as a monogram composed of *beta* and *epsilon* ( $\Theta$  or BE). But the middle horizontal is bulbous at the end and could be a pellet which has been connected with the *beta*. I would point to a parallel between  $\Theta$  and  $\Theta$  and  $\Theta$  and  $\Theta$ . Also, the use of a pellet with obverse  $S^{\bullet l^{\bullet}}$  supports the interpretation of this monogram as *beta* with a pellet.

<sup>&</sup>lt;sup>7</sup> A pellet seems to appear on R8, a die belonging to issue 1.

<sup>&</sup>lt;sup>8</sup> For example, H. Bompois, Examen chronologique des monnaies frappées par la communauté des Macédoniens avant, pendant et après la conquête romaine (Paris, 1876), p. 66; hereaster cited as Bompois.

century numismatists and modified by H. Gaebler have become canonical. But there has been no numismatic study of the coinage since Gaebler's ground-laying work around the turn of the century and with a larger population of coins available for study today these mint attributions are contradicted by die linkage within the CAE/AESILLAS issue 1 and the stylistic similarities between reverse dies coupled with obverse dies with different obverse die marks. It is instructive, however, to retrace the development of the traditional mint attribution of the tetradrachms in order to show the assumptions on which they are based.

While obverse  $\Theta$  has always been interpreted as a mint designation for Thessalonika, the other die letters have given rise to a number of different hypotheses. F. Lenormant, for example, regarded reverse A as a mint designation for Amphipolis<sup>10</sup> and the obverse B as a cryptic monogram for Brutus the tyrannicide (representing, he thought, the letters BT or BR).<sup>11</sup> H. Bompois correctly observed that reverse A appears with obverse  $\Theta$ , both of which, therefore, could not be mint designations. But Bompois kept Lenormant's reading of B, turning it into a mint designation for Bottiaea (although the usual mint mark for this region was  $\overline{\bf b}$ ).<sup>12</sup> Bompois further determined that the B was a mint designation for Beroea (although the usual designation for this region was the ethnic BEPOIE $\Omega$ N).<sup>13</sup> H. Gaebler, observing a die link between the B and the B, assigned coins with either of these obverse die marks to a single mint, a mint at Pella (the beta indicating the name Bottiaea, the



 $<sup>^9</sup>$  H. Gaebler, AMNG 3.1, Makedonia (1906), pp. 69-79, and 3.2, Makedonia (1935), p. 9. Gaebler's die study was based on 74 coins (combining the 1906 and 1935 volumes). He does not indicate the number of dies he found for each obverse die mark. The die study for this article was based on a total of 321 coins available at the ANS either in the coin trays or in facsimile. After Gaebler, scholarly debate has centered on the date of the coins. But recently some doubt has been expressed about the mint attributions. A. Burnett writes that the obverse die marks are "perhaps mint marks" (in CH 7, forthcoming) and Mattingly displays as much confidence when he writes that, "the  $\Theta$  mint is usually taken to be Thessalonika" (Chiron 1979, p. 155, n. 34).

<sup>&</sup>lt;sup>10</sup> Apparently he had been led to believe that the monogram was on the obverse; see Bompois, pp. 94-95.

<sup>&</sup>lt;sup>11</sup> F. Lenormant, "Mémoire sur les monnaies des questeurs romains de la Macédoine," RN 1852, pp. 329 and 332, and Bompois, p. 66, n. 1.

<sup>12</sup> Bompois, pp. 94-95, and 66 n. 1. BMCMacedonia, p. 64.

<sup>18</sup> Bompois, p. 66, n. 1. BMCMacedonia, p. 62.

district of which Pella was the leading city). Although Bompois had correctly rejected Lenormant's attribution of coins with reverse A to Amphipolis, he offered no explanation for this die mark. Gaebler, on the other hand, assigns coins without an obverse die mark to a mint at Amphipolis in order, it seems, to complete an analogy between the mint system of the tetradrachms and the mint system of the autonomous Macedonian merides from 167 to 148 B.C. But whereas coins were once attributed to Amphipolis because of an erroneous interpretation of a monogram with the initial letter A, Gaebler assigns coins to Amphipolis simply because they have no mint designation at all. Yet the existence of a mint at Amphipolis at this time remains unproven. M. Price, in a recent handbook on the coins of Macedonia, mentions mints at only Pella and Thessalonika. He is silent on the coins without any obverse letter and describes the mint designation for Pella as a simple β. 16

The obverse S°I° (formerly read as simply SI) presented a major problem for the theory that the other obverse letters were mint designations. The group of letters always appears with  $\Theta$  which rules out interpreting them as another mint designation. Bompois, who seems to have been the first to observe these letters, despaired at finding an explanation. Th. Mommsen seems to have thought that the letters represented the *praenomen* of the praetor CAE[SAR]. Gaebler objected to this on the grounds that AESILLAS and SUURA served under different governors although the letters are found on both their coins. But T. R. S. Broughton, presumably to account for the large number of coins signed by AESILLAS, assigns him at least half a year as *proquaestor* under C. Sentius Saturninus. There is, nonetheless, little to commend Mommsen's suggestion and Gaebler himself gave his approval to J. Friedlaender's ingenious explanation that the letters were a mark of value. This explanation has received wider



<sup>&</sup>lt;sup>14</sup> Gaebler (above, n. 4), p. 171 and AMNG (1906), p. 71.

<sup>15</sup> Gaebler (above, n. 4), p. 177 and AMNG (1906), p. 70.

<sup>16</sup> M. J. Price, Coins of the Macedonians (London, 1974), p. 33.

<sup>&</sup>lt;sup>17</sup> Bompois, p. 96.

<sup>&</sup>lt;sup>18</sup> Cited by Gaebler (above, n. 4), p. 178. Notice that the letters never appear on an obverse with the legend CAE PR.

<sup>&</sup>lt;sup>19</sup> MRR, p. 18. So too Th. Sarikake,  $\phi$ ωμαῖοι "Αρχοντες τῆς 'Εξαρχίας Μαχεδονίας (Thessalonika, 1971), p. 174.

<sup>&</sup>lt;sup>20</sup> See Gaebler (above, n. 4), p. 178, and J. Friedlaender, "Römische-macedonische Münzen," *ZfN* 1876, pp. 179-80.

and more general acceptance than it deserves.<sup>21</sup> According to this explanation, the SI are the equivalent of the Greek numeral for 16 (usually written 15') which is supposed to indicate that the tetradrachms are worth 16 Roman sestertii. But only three dies are inscribed with these letters and the letters are, in all cases, extremely faint and often, on some coins, almost completely obliterated.<sup>22</sup> These are, moreover, Roman capital letters which, it seems, should have completely ruled out Friedlaender's explanation in the first place. And finally, this explanation for the S°I° is inconsistent with the interpretation of the other obverse die letters as mint designations. The S°I° appear below the chin in the same position as the B. This combination of a letter and a pellet to form an obverse die mark is parallel to  $\Theta$ ° found on two dies (O15–16). An explanation for these obverse die marks should be consistent, take account of die links and incorporate the reverse die marks.

The history of the attribution of the tetradrachms to different mints shows that scholars have assumed that several mints were responsible for the issue of the tetradrachms. But the tetradrachms do not fall into two or three easily distinguishable groups, which would support the traditional mint attributions, on the basis of criteria such as die axis, die marks, or style. This causes immediate problems for the attribution of the tetradrachms to two or three mints simply by obverse die letters. All the coins have a twelve o'clock or nearly twelve o'clock die axis. Stylistically it is clear that the same die cutter engraved reverse dies which were paired with obverse dies with Θ, Θ, Θ and dies without any obverse letter. To defend the traditional mint attributions would require a hypothesis that dies were cut in one location and shipped to the mints. A double die link between dies with obverse Θ and dies without an obverse die mark

<sup>&</sup>lt;sup>24</sup> The transfer of dies from one mint to another is somewhat rare. For an example of such a die transfer see M. Thompson, "The Mints of Lysimachus," *Essays Robinson*, pp. 167 and 169, n. 1.



<sup>&</sup>lt;sup>21</sup> A. R. Bellinger, "Greek Mints under the Roman Empire," Essays Mallingly, p. 139. See also J. A. O. Larsen, "Roman Greece," in T. Frank, ed., Economic Survey of Ancient Rome (Baltimore, 1938), p. 333.

<sup>22</sup> As Gaebler himself observed in AMNG (1935), p. 10.

<sup>&</sup>lt;sup>23</sup> R12, R67 and R90 seem to have been cut by the same die cutter. Other pairs of reverse dies, each pair cut by another die cutter, may be noted here: R23 and R40, R16 and R81 and, finally, R2 and R60. In each of these pairs, the obverse dies have different die marks (including obverse dies without a mark).

(O2-3) within the CAE/AESILLAS issue 1, finally, disproves the attribution of coins without an obverse die mark to a mint at Amphipolis. The attribution of these tetradrachms to their mint or mints is a two-fold problem. The first task is to determine how many mints were responsible for the coins. The second task is to determine where those mints might have been located. The first task is a strictly numismatic problem while the second involves larger questions about the chronology of the coinage and the history of the Roman province of Macedonia. It must be stressed here that the numismatic evidence is not complete, but we believe it is sufficient for this investigation.

#### A CONTROL SYSTEM

The reverse die marks employed for the AESILLAS issue, together with the obverse letters, seem to have been used as a system of die control. Based on the material examined for this study, with 75 obverse and 150 reverse dies, the AESILLAS issue is by far the largest of the three separate issues of these tetradrachms. 25 But within this large issue, obverse and reverse dies may be arranged into smaller issues on the basis of their die marks. The reverse and obverse die marks are not all employed in the same fashion, although some of the differences may be due to the survival of coins and not to actual differences in use. The obverse  $\bf a$  and  $\bf b$ , for example, are found on only one die each (05-6). The written  $\beta$  is found on only two reverse dies (R15–16), both coupled with the obverse **B** (06). But the other reverse die marks, **A**, **A**, and one, two or three pellets, are found coupled with obverse dies with  $\Theta$  and obverse dies without a die mark. The reverse die marks, therefore, cut across the traditional division of the tetradrachms on the basis of the obverse die marks. In the previous section the stylistic similarities between dies with different obverse die marks were indicated. The use of identical reverse die marks for obverse dies with  $\Theta$  and obverse dies without a die mark further suggest that the AESILLAS issue cannot be divided into separate mint outputs solely on the basis of the obverse letters.

<sup>25</sup> We have found four obverse dies and nine reverse dies for the CAE/AESILLAS issue and one obverse and one reverse die for the SUURA issue.



The positions of the pellets vary and their use suggests that dies with pellets can be broken down into smaller categories. Some of the reverse dies coupled with O13 and O14, for example, have pellets and in most cases the single pellet appears between the legs of the sella. On the dies with a second pellet, the pellet appears below the knot of the wreath (R40 is the only exception). The pellets on the reverse dies coupled with the die linked obverse dies O23 and O24 are found below the cista. R61, the one reverse die with two pellets used with O23, has the second pellet between the legs of the sella. All the reverse dies coupled with O15 and O16, which are die linked, have two pellets and they all appear below the cista and between the legs of the sella. The varying positions of the pellets, therefore, do not suggest a random or haphazard use. The minor differences in their use suggests that coins were struck at intervals. But it is impossible to determine what those intervals were.

Two features of these pellets should be pointed out. First, pellets were deliberately applied to the dies as a control mark. Proof that the pellets were deliberately marked on the dies is provided by three reverse dies which were recut with the addition of a pellet (R33, R66 and R72). Second, pellets are found on dies cut by at least two different die cutters and these pellets therefore cannot be attributed to a die cutter's whim. One die cutter, for example, cut dies R21 and R22, but only the latter has a pellet. A different hand was clearly responsible for R29, which has two, R35 one, and R26, which has no pellets. R44–47, which all have two pellets, seem to have been cut by yet another artisan. Pellets appear, therefore, on reverse dies of noticeably different style.

Two die marks, however, seem to have been employed in a different manner than the pellets or the other letter die marks. The obverse mark  $S^{\bullet}I^{\bullet}$ , for example, was poorly inscribed and wore away more quickly than other features on the die (O78–80). Similarly the reverse  $\beta$  is lightly inscribed and is visible on only the best preserved coins (R15–16). Both of these die marks, therefore, seem to have performed a function which did not require them to be highly visible on the coins themselves.<sup>26</sup>



<sup>&</sup>lt;sup>26</sup> These letters are intriguingly similar to the Roman numerals that were lightly engraved on some Roman dies used in striking the coins of L. Manlius and L. Sulla. M. C. Crawford explains these numerals as control marks which might normally have been placed on some other part of the die (RRC, p. 585).

The reverse  $\beta$  is also different from the other reverse die marks in another way. It is the only reverse die mark to be found coupled with a single obverse die mark  $\beta$ . The use of a single control mark, in this case the letter beta, on both the obverse and reverse of a pair of dies is paralleled by the use of  $\Theta^{\bullet}$  on an obverse die coupled with reverse dies with two pellets (O15-R44-47, O16-R47). The coordination of the same die mark, various forms of B or pellets, on the obverse and reverse dies of two separate groups of coins, suggests that the  $\beta$  on O5 and O6 is a control mark and not, as previously thought, a mint designation.

The reverse die marks are used almost exclusively with the AESILLAS coins. No reverse die marks appear on the SUURA dies and only one CAE/AESILLAS reverse seems to have a die mark (a pellet below the knot in the wreath on R8). Excluding these dies (and the AESILLAS coins with  $\Theta$  and S°1° on the obverse), the remaining AESILLAS dies fall into two distinct groups. The first group consists of all obverse dies paired with a reverse die with a reverse mark (05 through 035); the second group of all obverse dies whose reverse dies bear no reverse die marks (O36 through O77). Obverse dies which are die linked to dies belonging to the first group also belong to that group. O21, for example, falls into the first group because one of its three reverse dies has two pellets. The reverse dies coupled with O20, which is die linked with O21, have no die marks but these dies are also assigned to group one because of the die marks on the reverse die coupled with O21. Table 2 clearly illustrates that the two groups exhibit distinct differences in the number of reverse dies paired with each of the obverse dies within the group. Only 12 obverse dies in group one (39%) have a single reverse die while 34 (or 81%) of group two have only a single reverse die. Over half of all the dies of group one (52%) are coupled with three or more reverse dies compared to only 10% of group two. The number of coins for each group also suggests a difference. There are 228 coins from group one included in this study with an obverse die:coin ratio of 1:7.3. For group two we have only 70 coins with a ratio 1:1.6. The obverse dies in group two are poorly represented here. In group one there are 12 reverse die links and four<sup>27</sup> recut reverse dies



<sup>&</sup>lt;sup>27</sup> Two reverse dies (R10 and R72) were recut and link two obverse dies. These are counted twice in Table 3 for this reason.

TABLE 2

Reverse Dies Paired with a Single Obverse Die:

Groups One (05-35) and Two (036-77) of Issue 2 (AESILLAS)

Group	One	Group	Two
No.	No.	No.	No.
Obv. Dies	Rev. Dies	Obv. Dies	Rev. Dies
12 (39%)	1	34 (81%)	1
3 (10%)	<b>2</b>	4 (10%)	2
5 (52%)	3	1 (10%)	3
2	4	2	4
3	5	1	5
2	6		6
3	7		7
1	14		
Total: 31	103a	42	58a

<sup>•</sup> Die linking reverses are counted twice. Excluding these the actual number of reverse dies for group one is 91 and for group two 57.

TABLE 3

Pattern of Die Usage in Groups One (O5-35) and Two (O36-77) of Issue 2 (AESILLAS)

Group One	Group Two
Reverse Die 12 Links	1
Recut Reverse 4	0
Dies	



while in group two we find only one reverse die link and no recut dies (Table 3).

A further difference between the two groups emerges from a frequency table for the weights of the coins (Table 4). For each group the weight of more than one-half the coins in the group has been recorded in their publication (144 for group one and 37 for group two). The frequency table shows that 49 coins from group one (34%) are above 16.80 and 15 coins (10%) are below 16.40 g. In group two, on the other hand, there are no coins above 16.80 g while 19 coins (51%) are below 16.40 g. The coins of group two, therefore, have a slightly lower weight than the coins of group one. The dies are represented by fewer coins and, unlike group one, show little evidence of extensive or exhaustive use. Group two seems to be a smaller issue. If the coins of group two were struck in small quantities, this also provides a rationale for the reverse die marks found for group one. The die marks may have been necessary because of the size of the separate issues involved. That groups one and two were struck at different mints or at different periods are reasonable assumptions. If they were struck in different periods from a single mint, group one, the largest and most complicated group would seem to have been the first. The important observation is that these two groups cut across the traditional division of the coins which is based on obverse die marks. Group one includes dies with no obverse die mark and dies with  $A, B, \Theta$  and  $\Theta^{\bullet}$ . Group two, on the other hand, comprises only dies with  $\Theta$  on the obverse.<sup>28</sup> If a single mint was responsible for these tetradrachms, it is possible that the  $\Theta$  is a designation for a mint at Thessalonika, the other letters and pellets forming a die control system within this one mint.29



<sup>&</sup>lt;sup>28</sup> O42-43, O57 and O75 are the only exceptions.

<sup>&</sup>lt;sup>29</sup> In the 80s B.C. Macedonia was overrun several times by Thracian tribes. Only during the 70s were the Romans able to pacify the province. Down to 80 B.C. there was probably one legion in the province, while from 80 to ca. 55 B.C. there were two to five legions (P. Brunt, *Italian Manpower: 225 B.C. to 14 A.D.* [Oxford, 1971], pp. 449 and 468-69). Before a firm location for the mint is proposed, the tetradrachms must be dated more accurately than has been possible up to now.

TABLE 4
Frequency Table: Groups One (O5-35) and Two (O36-77) of Issue 2 (AESILLIAS)

Group	One	Weight	Group Two
	1	17.70–17.79	
	5	17.00-17.09	
	12	16.90-16.99	
	31	16.80-16.89	
	38	16.70-16.79	2
•	21	16.60-16.69	4
	11	16.50-16.59	7
	10	16.40-16.49	5
	2	16.30-16.39	3
	5	16.20-16.29	2
	1	16.10-16.19	3
	3	16.00-16.09	1
		15.90-15.99	1
		15.80-15.89	1
	1	15.70–15.79	3
	1	15.60-15.69	
	1	15.50-15.59	1
		15.40-15.49	
		15.30–15.39	
	1	15.20-15.29	1
		15.10-15.19	
		15.00-15.09	1
		13.30-13.39	1
		13.10-13.19	1
Totals: 1	44		37
Mean:	16.67		16.07
Median:	16.48		14.93

#### CONCLUSION

Two major problems with these tetradrachms still remain, the date and the location of the mint. The coins offer no immediate clues for resolving these problems. But it may be hoped that a complete study and new hoard discoveries will offer evidence. It would be useful to know if coins with or without reverse die marks, for example, or coins from group one or two, predominate in certain hoards.<sup>30</sup> But until the chronology for the entire coinage is resolved, a problem which goes beyond the scope of this article, it remains impossible to offer a historical context for the two features of the coinage which have emerged from this die study, that the AESILLAS issue seems to fall into two distinct groups and, in one of these groups, a combination of letters and pellets as die marks was employed in a die control system.<sup>31</sup>

# CATALOGUE OF OBVERSE AND REVERSE DIES (arranged by issue and die control marks)

All dies are numbered consecutively except where a reverse die was subsequently used with another obverse die. Recut reverse dies are indicated with a letter (i. e. 10a). Die marks are indicated to the right of the die number. It should be pointed out here that this catalogue is not complete with only one coin for each reverse die indicated.<sup>32</sup> Illustrated specimens are marked with an asterisk.

- 30 A number of new hoards have appeared in the last few years, see Mattingly (above, n. 9), p. 155. R. A. Bauslaugh has undertaken a study of this hoard evidence.
- <sup>31</sup> The prospect that we will ever fully understand an ancient control system is not good. For the control system employed on Crepusius's coins, see, for example, T. V. Buttrey, "Denarii of P. Crepusius," ANSMN 21 (1976), p. 106: "Neither letter, symbol, nor number can convey any other information to us now. . . ."
- <sup>32</sup> Several casts at the ANS are marked "Cahn hd" although this hoard has not been published in *IGCH*. These casts are recorded in the catalogue as Cahn hd. (ANS cast). Similarly R14 is represented at the ANS by a tracing marked "Sepheriades hd." In the catalogue this item is recorded as Sepheriades hd.



# ISSUE 1: CAE/AESILLAS

01.		R1.		Glendining, 5 Mar. 1970, 37
		R2.		Ball 6, 9 Feb. 1932, 221, 16.40
<b>O2</b> .	_	R3.		*Stack's, 6 Sept. 1973, 364, 16.67
02.	_ <del> </del>	R4.		*ANS (Newell). 16.97 †
O3.	ө	R3.		*ANS (Newell). 16.41 †
		R4.		*Kricheldorf, 15 Oct 1955, 269, 16.22
		R5.		Münzhandl (Basel) 10, 15 Mar 1938, 227,
				16.04
		R6.		Berlin (Loebbecke), 16.50
		R7.		Münz. u. Med. FPL 370, Aug. 1975, 11, 16.72
		R8.	•	Glendining, 4 Oct. 1957, 62, 16.04
				(may be pellet below knot of the wreath as
				R28, 29 or 32)
04.	Θ	R9.		Helbing, 22 May 1926, 1701, 16.20

# ISSUE 2: /AESILLAS

# Reverse Die Mark: B

<b>O5.</b>	В	_	R10.		*ANS (Newell), 17.00 ↑
			R11.		Hess 219, 17 Oct. 1933, 53, 16.91
			R12.		SNGFitz 2346, 17.05 ↑
<b>06.</b>	B	L	R10a.		*ANS (Newell), 16.69 †
			R13.		SNGCop 1327, 16.69 ↑
			R14.		Sepheriades hd.
			R15.	β	Schulman, 1 Mar. 1962, 1241 (β below
				•	knot of wreath)
			R16.	β	*ANS, 16.92 \(\gamma\) (β as R15)

### Reverse Die Mark: One, Two or Three Pellets

07.	Θ	R17. •	Ciani, 6 Feb. 1956 (Hindamian), 359
			(pellet: between legs of sella)
08.	Θ	R18. •	Coin Galleries FPL 1, 1970, 94 (pellet as
			R17)
		R19. •	SNGAshmolean 3309, 16.62 † (pellet
			between Q and sella)



O9.	Ө	R20. •	Hirsch, 26 Nov. 1958, 95, 16.00 (pellet as R17)
O10.	۵	R21.	Kricheldorf, 12 Nov. 1959, 51, 16.48
010.	O	R21.	
		N22. •	Coin Galleries FPL 5, Nov. 1960, A631.
011		DOS	(pellet as R17)
011.	_	R23. •	ANS (Kelley), 15.73 \(\gamma\) (pellet as R17)
012.		R24.	Schulman, 1 Mar. 1962, 1238
O13.	θ	└ R24.	Hamburger, 27 May 1929, 209, 16.70
		R25.	SNGFitz 2348, 16.64 ↑
		R26.	Ratto, 16 May 1935, 13, 16.60
		R27. •	Helbing, 8 Nov. 1928, 3870, 16.55 (pellet as R17)
		R28. ••	SNGAshmolean 3308, 16.56 † (pellets
			between legs of sella and below knot at
			bottom of wreath)
		R29. ••	*ANS (Miller), 16.20 † (pellets as R28)
		⊢ R30.	NCirc., Jan. 1972, 18
014.	Θ	└ R30.	Sotheby, 27 May 1974, 296
		R31.	Sotheby, 20 July 1914, 72
		R32. •	Hirsch 13, 15 May 1905, 782, 16.78 (pellet
		1102.	below knot at bottom of wreath)
		R33.	MFA 736, 16.81
		R33a. •	Ciani, 12 Dec. 1921, 24 (pellet as R17)
		R34. •	Hamburger, June 1930, 68, 16.60 (pellet as R17)
		R35. •	Glendining, 7 Mar. 1957, 43, 16.72
			(pellet as R17)
		R36.	Hirsch, 22 Oct. 1962, 2358
		R37.	Stack's, 27 June 1952, 1059
		R38. •	ANS (Newell), 16.68 / (pellet as R17)
		R39. •	Hirsch, 27 June 1972, 68, 15.65 (pellet
			as R17)
		R40. ••	SNGCop 1329, 16.43 $\uparrow$ (pellets above E
			and below S)
		R41.	Hirsch, 21 Feb. 1963, 1186
		R42.	Coin Galleries, 9 Mar. 1956, 1561
		R43. •	Platt, 19 Apr. 1920, 22 (pellet as R17)
		11 <del>4</del> 0. •	1 iacc, 10 Apr. 1020, 22 (penec as 1117)



O15.	Θ•	R44.	••	Coin Galleries FPL 1, 1968, A20 (pellets between legs of sella and below cista)
		R45.	••	Coin Galleries, 29 Apr. 1976, 851, 16.46 (pellets as R44)
		R46.	• •	*ANS (Robinson), 16.57 † (pellets as R44)
		R47.	• •	Rauch, 4 June 1971, 40, 16.00 (pellets as R44)
O16.	Θ•	B47		Schulman, 26 May 1970, 82 (pellets as
010.	J			R44)
017.	Θ	R48.		*ANS, 16.67 † (pellets as R44)
O18.	Θ	R49.	• •	Cahn 60, July 1928, 472, 16.80 (pellets as R44)
O19.	Θ	R50.	• •	Berlin. 15.58 = M. Thompson, The New
				Style Silver Coinage of Athens, ANSNS 10
				(New York, 1961), 1233c (pellets as R44)
O20.	Θ	R51.		MünzZentrum 19, June 1974, 26, 16.52
		– R52.		ANS (Kelly), 16.25
021.	Θ	R52.		Vinchon, 6 May 1959, 39, 16.20
		R53.		Ball 6, 9 Feb. 1932, 222, 16.30
		R54.	• •	ACNACDavis (1969), 104, 16.76 /
				(pellets as R44)
022.	Θ	R55.	• • •	Platania hd. (pellets between legs of sella,
				below cista, to r. of Q)
		R56.	• •	ANS (Huntington), 16.57 \(\frac{1}{3}\) (pellets as
				R44)
		R57.	• •	Platania hd. (pellets as R44)
O23.	Θ	R58.		SNGAshmolean 3305. 16.44 ↑
		R59.	•	Vinchon, 24 Feb. 1971, 85 (pellet below the cista)
		R60.	•	*Kölner Münzkabinett, 14 Oct. 1976, 23,
				16.73 (pellet as R59)
		R61.	• •	Kastner 10, 18 May 1976, 25, 16.74 (pellets as R44)
		− R62.	•	SNGAshmolean 3307, 16.36 \(\gamma\) (pellet as
<b>.</b>	_			R59)
	Θ	└ R62.		<i>SNGFitz</i> 2349, 16.73 ↑ (pellet as R59)
O25.	θ	R63.	•	SNGCop 1330, 16.48 ↑ (pellet as R59)



O26.	Θ	R64.	Coin Galleries, 12 Nov. 1964, 449
		R65.	ACNACDewing (1985), 1225, 16.07
		R66.	Coin Galleries FPL 6, 1965, B 59
		R66a. •	Hirsch, 26 Apr. 1954, 1621, 1590 (pellet
			below A)
027.		R67.	ANS (Newell), 16.60 †
		R68.	Naville 17, 3 Oct. 1934, 385, 16.67
		R69.	ANACat., 16 Aug. 1925, 1193
		R70.	Ciani, 12 Dec. 1921, 25
		R71.	Sotheby, 7 May 1975, 93, 17.09
	Г	R72.	Hirsch, 22 Oct. 1962, 2359
028.	L	R72a. •	SNGFitz 2345, 16.95 <sup>†</sup> (pellet upper l.
			of Q)
		R73.	Sternberg, 24 Nov. 1977, 85, 16.52
		R74.	Cahn hd. (ANS cast), 16.75 †

# Reverse Die Mark: A or A

		R75.	Α	Naville 12, 18 Oct. 1926 (Bissen et. al.), 1208, 16.93 (die mark is certainly A, not A)
		R76.		Cahn 61, Dec. 1928, 84, 16.75
		R77.		SNGCop 1328, 16.87 ↑
		− R78.		Naville 13, 27 June 1928, 570, 14.99
O29.		- R78.		Ciani, 18 Dec. 1921, 190, 16.70
O30.		┌ R79.		Platania hd.
		R80.	A?	ACNACDavis (1969) 103, 16.80 † (top of
				A not visible, could be A)
		R81.	Ā	SNGAshmolean 3301, 16.74₹
O31.		└ R79.		Crowther Coins and Ant. FPL 2, 1972,
		[		9.132
		R81.	A	MFA (recent acquisitions), 55, 16.49 7
		R82.		J. Lepczyk, 28 Apr. 1978, 18
		R83.		ANS (Newell), 16.77 ↑
O32.	Θ	R84.		Coin Galleries FPL 5, 1963, F 61
		R85.		Bourgey, 3 Oct. 1976, 66
		R86.		Kastner, 30 Nov. 1976, 44, 16.74 ↑



				_	
			R87.	A	B. V. Head, Guide to the Principal Coins
					of the Greeks (London, 1932), pl. 65, 8,
			*> 00	_	16.45
0.00	•			A	*ANS (Newell), 16.79 †
O33.	Θ		R89.		Schwabacher hd., 16.96 †
			R90.		ANS (Parish), 16.63 ↑
			R91.		<i>McClean</i> , 3716, 16.45 ↑
			R92.		Stack's, 19 June 1969, 88, 16.72
			R93.	Α?	Münz. u. Med., 1964 (Blaser Frey), 1125
			T20.4	_	(top of A not visible, could be A)
004	_	Γ		A	Cahn hd. (ANS cast), 16.83 †
034.	Θ	L_	R94.	Ā	Cahn hd. (ANS cast), 16.76 ↑
			R95.		Spink and Son, 15 Feb. 1977, 50, 16.70
			R96.	_	Glendining, 26 Oct. 1972, 500
			R97.	A Ta	Harmer, Rooke, 4 Oct 1972. 50, 16.65
			R98.	Α?	Münz. u. Med., 2 Dec. 1975, 81, 16.80
			•••		(top of A is not visible, could be A)
			R99.		Coin Galleries, 23 Nov. 1971, 24
		Γ	R100.		Cahn hd. (ANS cast), 16.76 ↑
005	$\sim$	1	13400		***
O35.	Θ	_	R100.		Hirsch, 27 June 1972, 70, 16.05
		'- : Di	R100. e Mark	:s	Hirsch, 27 June 1972, 70, 16.05
No R		'- : Di	e Mark	:s	
No R O36.	everse O	'- : Di	e Mark R101.	:s	Bourgey, 3 Dec. 1928, 56
No R	everse	'- ! Di	e Mark R101. R102.		Bourgey, 3 Dec. 1928, 56 ANS (Huntington), 16.47 ↑
No R O36. O37.	everse O O	'- e Di	e Mark R101.		Bourgey, 3 Dec. 1928, 56 ANS (Huntington), 16.47 † ANS (Huntington), 16.40 †
No R O36. O37. O38.	everse O O O	'- : Di	e Mark R101. R102. R103.		Bourgey, 3 Dec. 1928, 56 ANS (Huntington), 16.47 ↑ ANS (Huntington), 16.40 ↑ SNGEvelpidis 1482, 13.32
No R O36. O37. O38. O39.	everse	_ P Di	e Mark R101. R102. R103. R104.		Bourgey, 3 Dec. 1928, 56 ANS (Huntington), 16.47 ↑ ANS (Huntington), 16.40 ↑ SNGEvelpidis 1482, 13.32 Cahn 75, 30 May 1932, 295, 16.10
No R O36. O37. O38. O39. O40.	everse  O  O  O  O  O  O	'- e Di	R101. R102. R103. R104. R105.		Bourgey, 3 Dec. 1928, 56 ANS (Huntington), 16.47 ↑ ANS (Huntington), 16.40 ↑ SNGEvelpidis 1482, 13.32 Cahn 75, 30 May 1932, 295, 16.10 SNGLockett 1543, 16.43 ↑
No R O36. O37. O38. O39. O40. O41.	everse  O  O  O  O  O	- Di	R101. R102. R103. R104. R105. R106.		Bourgey, 3 Dec. 1928, 56 ANS (Huntington), 16.47 ↑ ANS (Huntington), 16.40 ↑ SNGEvelpidis 1482, 13.32 Cahn 75, 30 May 1932, 295, 16.10
No R O36. O37. O38. O39. O40. O41.	everse  O  O  O  O  O  O	- Di	R101. R102. R103. R104. R105. R106.		Bourgey, 3 Dec. 1928, 56 ANS (Huntington), 16.47 ↑ ANS (Huntington), 16.40 ↑ SNGEvelpidis 1482, 13.32 Cahn 75, 30 May 1932, 295, 16.10 SNGLockett 1543, 16.43 ↑ Ancient Gems, 12 July 1971, 23 (Θ off
No R O36. O37. O38. O39. O40. O41. O42.	everse  O  O  O  O  O  O	- Di	R101. R102. R103. R104. R105. R106. R107.		Bourgey, 3 Dec. 1928, 56 ANS (Huntington), 16.47 ↑ ANS (Huntington), 16.40 ↑ SNGEvelpidis 1482, 13.32 Cahn 75, 30 May 1932, 295, 16.10 SNGLockett 1543, 16.43 ↑ Ancient Gems, 12 July 1971, 23 (⊖ off flan)
No R O36. O37. O38. O39. O40. O41. O42.	everse  O  O  O  O  O  O	- Di	R101. R102. R103. R104. R105. R106. R107.		Bourgey, 3 Dec. 1928, 56 ANS (Huntington), 16.47 ↑ ANS (Huntington), 16.40 ↑ SNGEvelpidis 1482, 13.32 Cahn 75, 30 May 1932, 295, 16.10 SNGLockett 1543, 16.43 ↑ Ancient Gems, 12 July 1971, 23 (Θ off flan) Ciani, 17 Feb. 1925, 300, 16.10 (obverse
No R 036. 037. 038. 039. 040. 041. 042.	everse  Θ Θ Θ Θ Θ Θ Θ Θ	- Dù	R101. R102. R103. R104. R105. R106. R107.		Bourgey, 3 Dec. 1928, 56 ANS (Huntington), 16.47 ↑ ANS (Huntington), 16.40 ↑ SNGEvelpidis 1482, 13.32 Cahn 75, 30 May 1932, 295, 16.10 SNGLockett 1543, 16.43 ↑ Ancient Gems, 12 July 1971, 23 (Θ off flan) Ciani, 17 Feb. 1925, 300, 16.10 (obverse Θ lacking)
No R 036. 037. 038. 039. 040. 041. 042.	everse  Θ Θ Θ Θ Θ Θ Θ Θ	- Pu	R101. R102. R103. R104. R105. R106. R107.		Bourgey, 3 Dec. 1928, 56 ANS (Huntington), 16.47 ↑ ANS (Huntington), 16.40 ↑ SNGEvelpidis 1482, 13.32 Cahn 75, 30 May 1932, 295, 16.10 SNGLockett 1543, 16.43 ↑ Ancient Gems, 12 July 1971, 23 (Θ off flan) Ciani, 17 Feb. 1925, 300, 16.10 (obverse Θ lacking) Numismatica Wien 7, 13 Feb. 1975, 64,
No R 036. 037. 038. 039. 040. 041. 042.	everse  Θ Θ Θ Θ Θ Θ Θ	- Di	R101. R102. R103. R104. R105. R106. R107.		Bourgey, 3 Dec. 1928, 56 ANS (Huntington), 16.47 ↑ ANS (Huntington), 16.40 ↑ SNGEvelpidis 1482, 13.32 Cahn 75, 30 May 1932, 295, 16.10 SNGLockett 1543, 16.43 ↑ Ancient Gems, 12 July 1971, 23 (Θ off flan) Ciani, 17 Feb. 1925, 300, 16.10 (obverse Θ lacking) Numismatica Wien 7, 13 Feb. 1975, 64, 15.21
No R 036. 037. 038. 039. 040. 041. 042. 043.	everse  O O O O O O O O O O O O O O O O O O	- Pu	R101. R102. R103. R104. R105. R106. R107. R108.		Bourgey, 3 Dec. 1928, 56 ANS (Huntington), 16.47 ↑ ANS (Huntington), 16.40 ↑ SNGEvelpidis 1482, 13.32 Cahn 75, 30 May 1932, 295, 16.10 SNGLockett 1543, 16.43 ↑ Ancient Gems, 12 July 1971, 23 (Θ off flan) Ciani, 17 Feb. 1925, 300, 16.10 (obverse Θ lacking) Numismatica Wien 7, 13 Feb. 1975, 64, 15.21 Platt, 25 Apr. 1934, 53
No R 036. 037. 038. 039. 040. 041. 042. 043. 044.	everse  O O O O O O O O O O O	- Di	R101. R102. R103. R104. R105. R106. R107. R108. R109.		Bourgey, 3 Dec. 1928, 56 ANS (Huntington), 16.47 ↑ ANS (Huntington), 16.40 ↑ SNGEvelpidis 1482, 13.32 Cahn 75, 30 May 1932, 295, 16.10 SNGLockett 1543, 16.43 ↑ Ancient Gems, 12 July 1971, 23 (Θ off flan) Ciani, 17 Feb. 1925, 300, 16.10 (obverse Θ lacking) Numismatica Wien 7, 13 Feb. 1975, 64, 15.21 Platt, 25 Apr. 1934, 53 R. J. Myers 21, 1968, 77, 15.9



049. ⊖	R114.	Ball FPL 39, Apr. 1937, 333, 16.50
050. Ө	R115.	Naville 1, 4 Apr. 1921 (Pozzi), 1003, 16.51
051. Ө	R116.	Myers-Adams 5, 15 Mar. 1973, 96
052. Ө	R117.	Glendining, 11 Apr. 1973, 233
053. Ө	R118.	Coin Galleries FPL 1, 1963, A40, 16.57
O54. ⊖	R119.	Platania hd.
О55. Ө	R120.	SNGFitz 2350, 16.53 ↑
О56. ⊖	R121.	McSorley FPL, no date, 86
O57. [Θ]	R122.	ANS (Huntington), 13.12 ↑ (Θ written O)
О58. Ө	R123.	Platania hd.
О59. Ө	R124.	Hesperia Art Bulletin FPL 10, 174
O60. ⊖	R125.	Platania hd.
O61. ⊖	R126.	Hirsch, 8 Oct. 1974, 674, 16.74
O62. $\Theta$	R127.	Bourgey, 29 June 1976, 21, 16.67
O63. ⊖	R128.	Bourgey, 29 June 1976, 22, 16.45
O64. $\Theta$	R129.	ANS (Appleton), 16.61
O65. ⊖	R130.	Superior Stamp and Coin, 15 June 1972,
		182
O66. ⊖	R131.	Münz. u. Med., 6 Dec. 1968, 48, 15.70
O67. ⊖	R132.	SNGAshmolean 3304, 15.57 ↑
O68. ⊖	R133.	Kress, 26 Nov. 1951, 59, 14.10
069. Ө г	R134.	Calico, ANE, 16 Dec 1960, 205, 16.10
070. Θ L	R134.	Superior Coin and Stamp, 10 Feb. 1975,
		1971
	R135.	Holmberg 141, 14 Oct. 1927, 99
071. Ө	R136.	Weber 2253, 15.09
	R137.	Münz. u. Med., 17 June 1954, 1120
072. Ө	R138	Platania hd.
	R139.	Peus 279, 14 Mar. 1972, 27, 16.70
073. Ө	R140.	Hirsch, 22 June 1966, 156
	R141.	Platania hd.
074. Ө	R142.	MünzZentrum 44, 25 Nov. 1981, 235, 15.81
	R143.	Bourgey, 21 Mar. 1972, 33
	R144.	Helbing 70, 9 Dec. 1932, 598, 16.30
O75. [Θ]	R145.	SNGAshmolean 3303, 16.27 ↑
• •	R146.	Sotheby, 7 May 1975, 92, 16.01
	R147.	Platania hd.



00			
		R148.	Helbing, 8 Nov. 1928, 3871, 16.35 (@written O)
O76.	Θ	R149.	ANS (Huntington), 16.54 7
		R150.	Coin Galleries FPL 5, 1962, E58
		R151.	Calico. ANE, 17 Nov. 1971, 163
		R152.	B. V. Head, Guide to the Principal Coins of
			the Greeks (London, 1932), pl. 65.7, 15.79
077.	Θ	R153.	Schulman, 9 Nov. 1970, 83
		R154	ANS (Newell), 16.50 /
		R155.	Platania hd.
		R156.	Santamaria, 25 Oct. 1951, A 447, 16.60
		R157.	Schlessinger 13, 4 Feb. 1935, 791, 15.70
O78.	⊖ S•l•	R158.	Kastner 12, 30 Nov. 1976, 45, 16.69 †
O79.	Θ	R159.	Merzbacher, 15 Nov. 1910, 350, 13.36
	S*[I*]		(only S <sup>•</sup> visible)
			Issue 3: / SUURA
O80.	S•I•	R160.	*ANS, 16.22 ↑

ROGER S. FISHER



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# THE SO-CALLED "PSEUDO-AUTONOMOUS" GREEK IMPERIALS

(PLATES 32-38)

Ann Johnston

Among the most puzzling coins included under the rubric "Greek Imperials" (coins of the Greek cities issued during the Roman Empire) are those which lack a portrait of a member of the imperial family on the obverse, often designated the "pseudo-autonomous" series. Standard Greek Imperials, referred to hereinafter as "the portrait issues," normally have a portrait of the emperor (or one of his relatives) with name and titles on the obverse, and a type usually of local significance on the reverse (e.g. Plate 36, 52 and 56). The pseudo-autonomous coins have reverses indistinguishable from the standard series, but on the obverse they have heads of deities and personifications, seated and standing figures, emblems and a range of other types. They date from roughly the same period as the rest of the Imperials, from the reign of Augustus to Gallienus or thereabouts, and examples are known from almost every part of Greece, Asia Minor and Palestine, though within that chronological and geographical spread there are great variations in issuing practice, as well as in types and denominations. The bulk of

<sup>1</sup> A version of this paper was originally delivered at the American Numismatic Society's 125th Anniversary Symposium on Numismatic Techniques and History in September 1983, whence the attempt to discuss some aspect of the Greek Imperials in relation to standard numismatic techniques. I should like to thank the Society for their invitation, which stimulated me to tackle a problem that I had long avoided, and for the opportunity to spend some time working in the ANS collection.



the material comes from the Province of Asia—Ionia, Lydia, Phrygia and Caria in particular—which is also the main source of the Greek Imperials in general.

There are two main problems associated with the autonomous issues. First, how can these coins be dated in the absence of imperial heads and titles, the usual method of arriving at approximate dates for the portrait issues? Normally the autonomous issues are grouped together before the portrait issues in catalogues and collections, sometimes with a date range so broad as to be meaningless (e.g. "first-third centuries A.D."), sometimes dated quite arbitrarily, sometimes not dated at all and grouped by type. Accurate dating of these pieces matters, not just because numismatists like to have everything neatly pinned down, but because the autonomous issues are sufficiently numerous to be an important element in both the coinage of an individual city and in the total output of Greek Imperials. Their correct placing in the sequence of issues may be crucial to the proper understanding of the pattern of production in a given city and they should also be taken into account in the current attempts to analyse general distribution patterns of production.3

The second problem is rather more complex, namely: is the absence of the imperial portrait significant? The nomenclature suggests that the pseudo-autonomous issues were significantly different from the portrait issues, and that such coins were an indication of a special mark of favor, struck only with specific permission. The issuing cities were nonetheless under Roman jurisdiction and could not have acted completely independently, hence the qualification of "pseudo" or "quasi" autonomous coins.

Those, then, are the problems.

The coins themselves are quite astonishing in their variety, even among the notoriously diverse Greek Imperials. The obverse types are

- <sup>2</sup> A few Greek Imperials (both with and without imperial portraits) include era dates in the legends, but this is too rare to be generally useful. For examples, see nos. 58 and 68.
- <sup>3</sup> See, for example, W. Leschhorn, "Le monnayage impérial d'Asic Mineure et la statistique," *PACT* 5 (1981), pp. 252-66.
- <sup>4</sup> G. Macdonald, "The Pseudo-autonomous Coinage of Antioch," NC 1901, pp. 105–35 attributes the term to Regling, but I have searched Regling's earlier writings in vain for the original citation.



almost always human heads, though all manner of other things are also found (Plates 32, 1–2 and 34, 30). Gods and heroes, the traditional types of Greek coinage, are inevitably popular and are often indistinguishable from the hellenistic versions of the same characters (Plate 35, 34–35 and Plate 36, 55). Famous ancestors, legendary or real, such as Homer, Hector or Xenophon the Physician, are proudly displayed (Plate 32, 3–4 and 8); local worthies of more recent vintage, even sometimes contemporaries, may be recorded, as in a splendid series recalling famous citizens at Mytilene (Plate 32, 5–7). Occasionally in the early years of the empire there are Roman officials, such as proconsuls (Plate 37, 62).

Personifications form a major category: the most common is the City, shown wearing a mural crown (a type which was already well established in the hellenistic period, of course; Plate 37, 57 and 63 and Plate 38, 71–72), but the other institutions of civic administration are also frequently portrayed. The types are carefully distinguished—the Demos usually depicted as a bearded male, the Boule is usually veiled, the Gerousia suitably mature and veiled, the Council of Young Men appropriately youthful (Plate 33, 10-13). The Roman Senate normally appears as a young man (Plate 35, 36–40 and 44), though sometimes the female gender of the word Synkletos in Greek is recognized and the Senate becomes a draped female bust (Plate 32, 9). The type is found exclusively in the Province of Asia (see fig. 1), which was administered by the Senate in the imperial period as it had been since the Pergamene kingdom was willed to Rome in 133 B.C.; there was a cult of the Senate which, like the cult of the emperor, was a means for the Greek cities of coming to terms with the rule of Rome in the same way that they had



<sup>&</sup>lt;sup>5</sup> See, for example, Attalea in Pamphylia (Corpus in N. Baydur, "Die Münzen von Attaleia in Pamphylien," JNG 25 [1975], pp. 33-72). Baydur no. 229 could easily be confused, in a photograph at least, with Baydur nos. 50-52 and dated with them in the second century B.C., whereas it must be dated to the mid second century A.D. because the reverse die is shared with an obverse of Marcus Aurelius Caesar, no. 228.

<sup>&</sup>lt;sup>6</sup> The exception is Mallus in Cilicia, which struck an issue with the bungled Latin legend SACRA SINATUS after it became a Roman colony in about A.D. 250 (see *BMC*, p. exxiv).

accommodated the hellenistic kings.<sup>7</sup> Bithynia-Pontus, too, was a senatorial province but it does not seem to have marked its relationship to the Senate on its coins.



Fig. 1. Senate Obverse Types, First-Third Centuries A.D.

In similar vein are the cult and coin types of the goddess Roma;<sup>8</sup> she is usually shown in military dress, often but not always named



<sup>&</sup>lt;sup>7</sup> On the imperial cult in general, see now S. R. F. Price, *Rituals and Power* (Cambridge, 1984), whose illustrative material is largely drawn from Asia Minor. On the cult of the Senate, see G. Forni, "IEPA e ΘΕΟC CYNK ΛΗΤΟC. Un capitolo dimenticato nella storia del Senato Romano," *Mem. Acc. Naz. dei Lincei* (cl. Sc. mor., stor. e fil.), series 8, vol. 5, fasc. 3 (Rome, 1953).

<sup>&</sup>lt;sup>8</sup> The conjunction of the Senate and Roma was very common in Lydia and Ionia particularly, in the late first and early second centuries. The two busts occur together as one type (e.g. Plate 33, 16), or more often as obverse and reverse type (Plate 33, 15), a curious issue without ethnic, attributed to Pergamum in *BMC* because of a large hoard of these coins which came from the area [see *BMCMysia*, p. 134n]).

(Plate 33, 14 and 17). There is, of course, the possibility of confusion with Athena, and unnamed types are frequently described in catalogues as "Athena or Roma," or even simply "Athena." In fact most of these types should probably be identified as Roma, except where a local cult of Athena is known from other sources; there is no particular reason why a city should have adopted Athena types where there was none before, whereas Roma would have been appropriate anywhere. It is, however, interesting that in spite of the apparent universality of the Roma cult, these types are again only found in the Province of Asia, which ties up with the view that the Roma cult was superseded by the imperial cult after Augustus and survived only in the area where it had first grown up (Asia), and where it had established temples and priests. Cities in the Province of Asia which had cults of Athena obviated the potential confusion by showing Roma as a city personification, with mural crown, and reserving the military goddess type for Athena; this is shown most explicitly on a reverse of Ilium which shows Roma, Athena and the Senate (Plate 33, 17).9

Another category of obverses involves the emperor or members of his family: the emperor himself sometimes appears with a personification (as, for example, Galba with the Senate: BMCTroas Ilium, pp. 44-45),

<sup>9</sup> On the cult in general, see R. H. Mellor,  $\Theta EA$   $P\Omega MH$ : The Worship of the Goddess Roma in the Greek World (Göttingen, 1975), who deliberately excludes the numismatic evidence; Fayer, "La 'Dea Roma' sulle monete greche," Studi romani 23 (1975), pp. 273-88, discusses the coins with the legend ΘΕΑ PΩMH or variants and lists the cities striking coins with the different variants of the type: helmeted, turreted, etc. She maintains that the helmeted bust type was introduced only in the second half of the second century and the seated Roma only in the reign of Trajan, so that the distinction between the varieties is purely chronological. This may well be true, but the question needs further study, taking into account (as far as possible) the unnamed figures as well. For example there is the case of Smyrna, which had a temple to Roma from the second century B.C. Infuriatingly, it appears that Smyrna seldom used Roma/Athena types before the third century. In Caracalla's sole reign the Roma temple is shown containing a seated military figure (e.g. BMC 403), who also appears holding a replica of the temple (e.g. BMC 389) —are we to assume that this was not the original cult statue but a post-Trajanic replacement? What about the helmeted female bust on a coin of Trajanic date (BMC 147)—an isolated instance of Athena, or is it Roma (as would be appropriate to the Nike type on the reverse)? There may be other cities with known cults of Roma and/or Athena where Fayer's hypothesis could be checked more thoroughly.



and sometimes even as a personification (this was especially popular for the empresses, particularly Faustina II, whose features were adapted to represent the Kore of Cyzicus and other city Tyches: Plate 34, 22 and 23). One curious case is that of Nicopolis, where the head of Augustus, as founder of the city, was used as the obverse type of pseudo-autonomous coins into the third century (Plate 34, 24).<sup>10</sup> Another curiosity is the

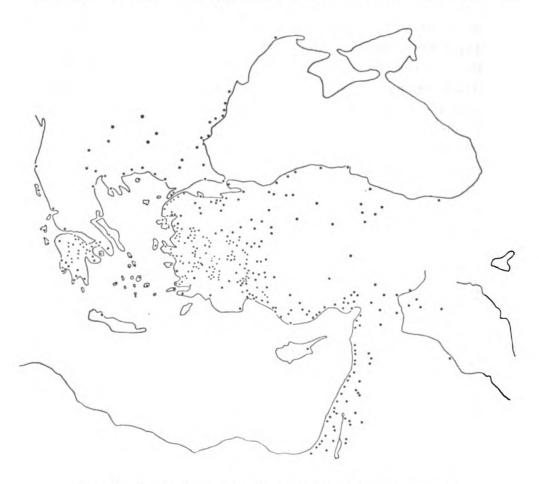


Fig. 2. Greek Imperial Mints under Septimus Severus (from T. B. Jones, *Proc. Amer. Phil. Soc.* (1963), p. 332

10 The use of the type in this way was not recognized by M. Caramessine Occonomides, H Νομισματοκοπία τῆς Νικοπόλεως (Athens, 1975), but was pointed out initially by Michael Grant, From Imperium to Auctoritas (Cambridge, 1946; repr. 1969), p. 466, no. 9 and n. 6, hereafter cited as FITA; and more fully by C. M. Kraay, "The Coinage of Nicopolis," NC 1976, pp. 235-47.



appearance of the emperor as the *reverse* type, for example on a series of autonomous coins of Tripolis in Lydia where Trajan is shown on the reverse, standing crowning a trophy with his name and title as the reverse legend (Plate 34, 19); Hierapolis-Castabala has a similar type for Septimius (Plate 34, 26). Usually, however, the reverse types are indistinguishable from those of the portrait issues.

The geographical distribution of the "pseudo-autonomous" issues is roughly that of all Greek Imperials. Fig. 2 shows the cities striking coins in the reign of Septimius Severus, and probably represents the maximum extent of the Greek Imperials. Not all of these cities struck autonomous issues: rather fewer cities than shown in mainland Greece and Thrace, perhaps 80-90% of those in Asia, and a much lower proportion (perhaps 10-25%) of the rest. The Province of Asia was by far the most prolific area, but there were differences even within the province. Some cities never, or hardly ever, struck non-portrait issues: Ephesus, Nicomedia and Pergamum, for instance. Others struck issues very frequently and such coins account for a major part of their output: Hierapolis in Phrygia had an especially rich series, while Smyrna must have been the most abundant of all. Smyrna struck issues entirely composed of autonomous coins (e.g. Plate 34, 27–30), and also regularly struck certain denominations with unchanging autonomous types over a period of 100 to 150 years.<sup>11</sup> Most cities fall between the two extremes, striking some autonomous coins, whether as regular issues of particular denominations or else as part of portrait issues, the autonomous types filling in intermediate denominations alongside those with imperial portrait.

It is interesting to observe the way that the idiosyncrasies of the major cities became extremely significant in the later second and in the third centuries, when much of the coinage of the Greek East was being produced by relatively small numbers of workshops supplying many cities. Konrad Kraft has shown<sup>12</sup> that there were large networks of cities sharing obverse dies—the obverses being universally applicable



<sup>&</sup>lt;sup>11</sup> See SNGvAulock or SNGCop for the range of styles for types such as the Amazon Smyrna (late second century-mid third century) or Zeus Akraios (Trajan to Gallienus).

<sup>&</sup>lt;sup>12</sup> K. Kraft, Das System der kaiserzeitlichen Münzprägung in Kleinasien (Berlin, 1972); hereafter cited as Kraft.

since they bore the head of the emperor, only the reverses being specific to the issuing city. The dies emanated from a handful of workshops, which may been have peripatetic but were probably loosely based in various regions which Kraft labelled according to its major city: "Ephesus," "Smyrna," "Sardis," "Cyzicus," "Apamea," etc. He touched on the pseudo-autonomous issues and identified some die links among them, 13 but his main focus was on the portrait issues.

Clearly Senate, Roma and other non-specific autonomous obverse types could be shared by several cities as readily as imperial obverses: cursory inspection of the material for the Province of Asia suggests that, in fact, there may ultimately prove to be as many links between the autonomous as between the portrait obverses of different cities, and that the pattern of autonomous issues struck by the major cities was carried over into the rest of the area served by the same workshop. Thus cities within the orbit of the "Smyrna" workshop tended to issue autonomous coins, while those within the orbit of "Ephesus" did not. The workshops were not static in their clientele, so that a city would issue autonomous coins while it was being supplied by "Smyrna" but would then revert to portrait issues alone when it switched to "Pergamum."

As with the geographical distribution, the chronological spread of the autonomous issues is roughly in line with that of the Greek Imperials in general. In some cities it is hard to distinguish the pre- from the post-Augustan coinage, and striking of bronze may have continued without interruption from the earlier period. In fact there is very little that can be dated with certainty to the reign of Augustus, though whether because independent coinage was forbidden or because the cities wished to honor their new ruler is hard to say. From Tiberius onward,



<sup>13</sup> Kraft, pp. 26 29, and 90, n. 1.

<sup>&</sup>lt;sup>14</sup> See, for example, the coinage of Tarsus: compare SNGvAulock 5968 and following coins, attributed to the end of the first century B.C. and the first two centuries A.D.

<sup>&</sup>lt;sup>15</sup> It is possible that the striking of official Roman bronze in the East, the CA coinage for example, may have affected the activities of city mints. See M. Grant, The Six Main Aes Coinages of Augustus (Edinburgh, 1953), and most recently C. J. Howgego, "Coinage and Military Finance: The Imperial Bronze Coinage of the Augustan East," NC 1982, pp. 1–20. Grant reckoned that many of the city coinages (with imperial portrait) attributed to the reign of Augustus were in fact posthumous and argued that about one hundred cities should be deleted from the lists of mints striking for Augustus (FITA, pp. 328–34).

however, there are sporadic issues, gradually building up pari passu with the growth of local coinages in general. Here again the influence of the workshops seems crucial, the increase in the incidence of (for example) Senate types in the 240s to 260s being associated with the activities of the "Smyrna" workshop.<sup>16</sup>

Let us now return to the two problems posed at the beginning, and start by considering the more straightforward one of dating. There are undoubtedly very real problems about dating the autonomous issues, but there are also a large number of clues which can help to pin down issues more precisely than merely within the century, for instance.<sup>17</sup> Obviously there is much that can be learned from fabric and style in comparison with the portrait issues. The flans tend to be rather motley but some trends are discernible: the first-century flans are usually twice the thickness of the third-century flans of the same diameter and hence much heavier; first-century flans often have traces of having been cast in "tree" molds which have left lugs or indentations on one side; second-century flans are often elliptical, perhaps because the metal was poured out into slightly globular shapes which were then distorted when struck; third-century flans are much more regular and may have been shaved into neat circles. The impressions of first-century coins, even in good condition, are often not as sharp as third-century ones, perhaps because of differences in temperature when the flans were struck. First-century coins are all small, mostly 15-22 mm in diameter; larger modules (28+ mm) start to be introduced at the end of the first century, and really large, medallion-style pieces date from the reign of Antoninus Pius onward. Engraving style can be very distinctive and a great help in comparing autonomous and portrait series. A clear example is given by three pieces of Bagis in Lydia (Plate 35, 31-33). The Men type is dated in BMC to the reign of Nero (that is, before any other coins of Bagis are known) by analogy with Mên types elsewhere, whereas comparison with the piece of Domitian (BMC 19) and a Senate



<sup>16</sup> See, for example, Kraft, plates 9-10.

<sup>&</sup>lt;sup>17</sup> The problem has been solved with varying degrees of success by writers of monographs on city coinages. For a model of common sense, see the study of Cyzicus by H. von Fritze, "Die autonome Küpferprägung von Kyzikos. Eine chronologische Studie," *Nomisma* 10 (1917), pp. 1–32.

type (BM 1969) suggests that the three belong together as a sequence of denominations struck under Domitian (note the similarity of the profiles).

Σ	С	C	Z
Ω	ω	W	
Ε	$\epsilon$		

Fig. 3. Letter Forms

Obverse	Reverse	
$\Omega$	Ð	only first century
O or O	Ö	usually second century
Q	$\circ$	usually third century

Fig. 4. Run of Legends

Related to style are the forms of letters and of legends (figs. 3-4). Sigma, omega and epsilon are usually the most indicative and idiosyncratic: the 4-bar sigma had died out by the end of the first century, to be replaced by the lunate sigma, sometimes (like the epsilon) squared off, especially in the second century. Omega is usually  $\Omega$ , more or less closed, but occasionally  $\omega$ .\(^{18}\) At the end of the first century and in the early second, letters were often given elaborate serifs (e.g. Plate 33, 20 and Plate 35, 34). Letters may be bungled simultaneously in both portrait and non-portrait coins—a backward N can be a clear giveaway. The run of the legend may be useful, again in comparison with the portrait series (see fig. 4). The content of the legend may be informative, too. Some-

<sup>18</sup> E.g. Plate 34, 24. Nicopolis (as Kraay [above, n. 10], pp. 214-45 notes, the ω omega was used in the second century from Hadrian to Antoninus Pius), or the four-barred sigma on the first-century coin of Aphrodisias (Plate 37, 60). See also the use of Z, Z and C for the ethnic at Smyrna: BMC, p. 253n.; T. J. Cadoux, Ancient Smyrna (Oxford, 1938), pp. 31-32, gives instances of the same practice in inscriptions as well, the Z or Z being in fashion until ca. A.D. 120.



times the cases change: the Senate was often given in the accusative in the first century, but then almost invariably in the nominative thereafter. The spelling of the names of some cities varied, as in the case of Nacrasa in Lydia (fig. 5), and the name itself might change, with the addition or omission of titles like Flavia or Kaisareion. Cities which were metropoleis sometimes recorded the fact only spasmodically, though consistently within issues. Numbers of neocorates varied. Magistrates' signatures are obviously useful because they may provide a link between the autonomous and portrait issues; problems may arise because the same names may be repeated—at Bagis, for instance, there is an Apollodorus who signed issues for both Trajan and Commodus, and a Gaius for both Trajan and Septimius and can only be disentangled by style, fabric or even die position.

Domitian	ΝΑΚΡΑCΕΙΤΩΝ
Trajan - Hadrian	ΝΑΚΡΑΟΙΤΩΝ
Antoninus Pius Marcus Aurelius Lucius Verus	ΝΑΚΡΑCΕΩΝ
Marcus Aurelius	ΝΑΚΡΑCΙΩΤΩΝ

Fig. 5. Spelling of Ethnic



<sup>&</sup>lt;sup>19</sup> For examples Daldis in Lydia was both *Flavia* and *Kaisareon* in Flavian times; Tralles and Mostene, both recipients of aid from Tiberius after the great earthquake of A.D. 17, adopted the title *Kaisareon* and used it throughout the first century. Philadelphia used *Flavia* intermittently throughout its coinage.

<sup>&</sup>lt;sup>20</sup> E.g. Hierapolis, Plate 33, 12 (without) and Plate 36, 55-56 (with). For the attribution of the neocorate to Elagabalus, see A. Johnston, "Hierapolis Revisited," NC 1984, pp. 52-80; Sardis had two neocorates in the reigns of Gordian III and Philip and added a third in the reign of Valerian (Plate 38, 71-72).

<sup>&</sup>lt;sup>21</sup> Apollodorus: F. Imhoof-Blumer, Kleinasiatische Münzen 1 (Vienna, 1901), p. 170, no. 6 (Trajan), BMC 22 (Commodus). Gaius: BMC 20 (Trajan), BMC 25 (Septimius).

Types can give some indication of date. As at other periods, the direction in which heads face may be significant, and changes from right-facing to left-facing or vice versa may permit a sequence to be established.22 Types themselves changed: Artemis Ephesia did not acquire her stags until the reign of Trajan, for example.<sup>23</sup> Some appeared only after a certain date: the Kore of Sardis was unknown before the later second century as a type (Plate 33, 18), Telesphorus dates back to Trajan/Hadrian (Plate 35, 41, 47 and Plate 36, 49), Sarapis (especially with Isis as a reverse) became popular during the late second century (Plate 35, 42), agonistic types (crowns, wreaths, prize tables, etc.) tend to belong to the third (Plate 32, 9 and Plate 38, 58). The Senates evolve from Theos to Hiera Synklelos, the changeover taking place roughly in the period from Domitian to Trajan. It is instructive to look at the Senate types struck at Smyrna from Tiberius to Gallienus and to note the changes in style of the bust and lettering, and in the kinds of flan used (Plate 35, 36–40).

Searching for die links may be a fruitless activity unless there is adequate material to hand, but it may prove very useful if there are dies shared with datable pieces. An autonomous obverse may be found paired with a reverse that can be dated because of a magistrate's name (e.g. Plate 36, 51-52). There may be reverse dies shared with the portrait series (Plate 36, 55-56).<sup>24</sup> The sharing of autonomous obverse dies through the operation of the workshops can provide clues: a shared Senate obverse, for instance, may have been used with a datable reverse for another city (Plate 36, 50-52), or else the very fact of two cities sharing an obverse die may pinpoint the date of the issue because the two cities in question only belonged to the same supply network at



 $<sup>^{22}</sup>$  E.g. Maconia (Pl. 35, 34-35), Zeus facing first left, then right; ultimately there was a return to left-facing heads (BMC 10). The direction of the Roma and Heracles heads also alternate (see BMC 1-2, SNGCop 214-15). See also the Smyrna Amazon type, first right (BMC 187), then left (BMC 191).

<sup>&</sup>lt;sup>23</sup> See R. Fleischer, Artemis von Ephesos und verwandte Kultstatuen aus Anatolien und Syrien (Leiden, 1973), pp. 112-13. See Plate 35, 43-44.

<sup>&</sup>lt;sup>24</sup> See P. R. Franke, "Zur Chronologie der autonomen Münzen des bithynischen Tios," AA 1966, pp. 58-67, for examples of reverse die links between obverses of Septimius, Julia Mamaea and Julia Maesa and pseudo-autonomous obverses; see especially p. 66 n. 30.

one period (Plate 36, 53-54).<sup>25</sup> Sometimes networks struck distinctive issues, such as the tiny coins with obverses of Roma (not Athena) or Heracles and reverses such as a lion or Telesphorus (Plate 36, 45-49). These little coins were once thought to indicate a "league" of some sort,<sup>26</sup> but they are probably simply the types chosen for ease of execution and recognition for the smallest denomination by a workshop operating between Pergamum and the Hermus valley in the late 180s.

Finally, let us examine the purpose and significance of the pseudoautonomous issues vis-à-vis the portrait issues: are they fundamentally different or are they merely another facet of the enormous diversity of the Greek Imperials, without any special status? Some of the scholars who have written about the Imperials in the course of the last century have thought that the autonomous issues had a real political significance: Lenormant, Regling and Macdonald all saw the absence of an imperial portrait as a reflection of a greater degree of independence of action, granted as a special dispensation by the Roman authorities on a limited number of occasions to a limited number of cities.<sup>27</sup> They based their analysis on the example of the "free" cities like Chios and Termessus, or Athens, which proclaimed their autonomy by never striking coins with imperial portraits (Plate 37, 65-67). Alfred Bellinger advanced a novel hypothesis,28 which seems never to have been taken up by anyone else, that there was an economic significance behind the absence of the imperial portrait, in that any profit arising from the striking of such coins would accrue to the city alone, instead of being shared with the Roman state—obviously, therefore, a privilege that the authorities would control strictly (fig. 6).



<sup>&</sup>lt;sup>25</sup> Blaundus and Tripolis only shared dies in the reign of Philip (see Kraft [above, n. 12], pls. 35, 49 and 36, 54); Blaundus was a regular customer of "Sardis" while Tripolis normally drew dies from workshops serving Phrygia or the Maeander valley.

<sup>&</sup>lt;sup>26</sup> L. Robert, Villes d'Asie Mineure (Paris, 1962), pp. 188 91 and 366-77, with earlier bibliography.

<sup>&</sup>lt;sup>27</sup> F. Lenormant, La monnaie dans l'antiquité 2 (Paris, 1878), pp. 166-77; K. Regling, Die Münzen von Priene (Berlin, 1927), p. 13; MacDonald (above, n. 4).

<sup>&</sup>lt;sup>28</sup> Most fully spelled out in his "Greek Mints Under the Roman Empire," in Mattingly, p. 148, but also mentioned in his Excavations at Dura-Europos, Report of Seventh and Eighth Seasons: The Coins (New Haven, 1939 rpt.), pp. 407–8 and Troy. The Coins (Princeton, 1961), pp. 144-45; hereafter cited as Bellinger, Troy.

	Obverse Type	Reverse Type	Profit
Roman Imperial	Imperial	Imperial	Rome
Greek Imperial			
Portrait Issues	Imperial	Local	Rome/City
Pseudo-Autonomous			
Issues	Local	Local	City

Fig. 6. Bellinger's Assignment of Profit

The opposing camp sees nothing remarkable in the absence of the imperial portrait.<sup>29</sup> One such view is that the autonomous types are limited to the minor denominations, which would be entirely in line with Roman practice since the smallest denomination of the Roman imperial bronze system, the quadrans, never carried an imperial head either. However, this view is based on an ignorance of the material: the autonomous coins in fact come in all denominations, small, middle and large. A more general view is that the pseudo-autonomous coins were struck alongside the portrait issues fairly indiscriminately, perhaps just to add to the variety, perhaps as an assertion of individuality, another element in the notorious rivalry of the now-impotent cities of the Greek East.

At this point it would be very satisfying to be able to reveal some new and blindingly obvious explanation for the phenomenon which has eluded all previous scholars, but it seems highly unlikely that such a solution to the puzzle exists. None of the elaborate explanations works for the material as a whole. Bellinger's proposals would have been impractical given the diversity of types with imperial/local significance and the lack of a clear-cut division between portrait and non-portrait

<sup>29</sup> E. g. H. Dessau, Geschichte der römischen Kaiserzeit 1 (Berlin, 1921), pp. 210-11, who sees no reason for distinguishing the two series. Neither did H. Mattingly, Roman Coins (London, 1960), p. 192, or Kraft (above, n. 12), p. 26. Those who thought the difference unimportant naturally did not rush into print to say so--I suspect this to have been the view of Barclay Head, who refers simply to the autonomous coins as "Coins without imperial heads" in the volumes of BMC that he edited, and also by Clemens Bosch in his various works.



issues, quite apart from the inherent improbability of the profit-sharing scheme. Regling's political explanation might have had some validity in the early days of the Empire when there were not very many cities striking coins, but it is difficult to see how there could have been any special license to strike autonomous issues in the second and third centuries with the advent of large-scale workshop operations which seem to have been the main factor determining whether or not a city struck only portrait issues. Admittedly we know very little about the authorization required for Greek Imperial issues in general, and we know from Pliny's letters (for example) that the emperor was often expected to make decisions about the most picayune matters, but any system of control must have become unworkable as the issues proliferated. In any case, many of the supposedly "autonomous" types (like the heads of the Senate or Roma) are as loyally Roman as a portrait of the emperor—if not more so, as the emperors came to be more disreputable and transient in the third century.

If we look for differences between the portrait and non-portrait issues it is very difficult to perceive any divergence between the two in intention or use. For any category of coins with imperial portrait one can find other examples without. Both are found with the signatures of local magistrates or of Roman officials (nos. 14, 27–30, 51 and 63). Issues which were gifts of individuals, dedicated or voted, include both autonomous and portrait coins (Plate 37, 59-61); homonoia issues might or might not have imperial-head obverses (Plate 37, 64). Autonomous coins were struck by Greek cities and Roman colonies (Plate 37, 57), and by groups of cities acting in *koina* (Plate 37, 58). It is interesting that even some of the "free" cities chose nonetheless to strike issues with portraits of the emperors (Plate 38, 68-69), so that one must conclude that no overwhelming significance was attached to the choice of obverse type. The autonomous issues were not apparently treated at all diferently in circulation: <sup>30</sup> they have been found outside their own cities

<sup>30</sup> I did examine the possibility that the absence of autonomous coins at Ephesus and Nicomedia might have arisen because coinage in those cities came under the direct jurisdiction of the proconsuls, who had their headquarters there. Ephesian Imperials are also peculiar in the Province of Asia in that they are not signed by city magistrates after the reign of Claudius, though they are occasionally signed by proconsuls. The hypothesis evaporated on the discovery that there is an issue for



and were countermarked elsewhere. So, all in all, one is forced to conclude that there is no perceptible difference between the two categories of Greek Imperials.

There seem to have been two practical advantages in choosing to strike autonomous types: as a denomination marker and in order to derive maximum use from dies. The Greek Imperials do not, on the whole, carry marks of value and they do not appear to have been struck on a universally recognizable denomination system like that of the Roman bronze. There could be as many as half a dozen different denominations ranging between 15 and 45 mm in diameter. In the third century the Roman practice of differentiating styles of imperial bust on the different denominations was gradually adopted: radiate and laureate crowns, frontal and rear-view busts or heads, alternate senior and junior members of the imperial family. The autonomous types provided a very straightforward way of marking denominations from the outset, either on their own or alongside imperial portraits. A city might use a Senate type for the unit, a Boule for the half and a Roma for the quarter, so that the coins would be immediately recognizable; there does not seem to have been any universal association of the standard types with particular denominations because they are found on too great a range of flans, but such an arrangement would have been convenient among habitual users of a city's coins and could have been maintained indefinitely.

The other practical benefit really came into its own with the large-scale coining activities of the workshops in the third century: instead of having to cut new dies for each change of emperor, mints could use autonomous types until the dies wore out. The "Smyrna" workshop in particular took advantage of this fact and some of its dies were used over a wide area for as much as a decade (fig. 7). Even earlier, when emperors changed less frequently, there would have been a certain convenience in being able to turn out coins from dies kept on hand that did not date at all. It was also possible to reuse non-imperial obverses for elaborate medallion-size pieces which were presumably struck in small quantities on special occasions (Plate 38, 71–72).

Antoninus Pius signed in the normal way by a grammaleus (e.g. SNGvAulock 1887); the "signatures" on the coins in any case may merely be dating devices without other significance.



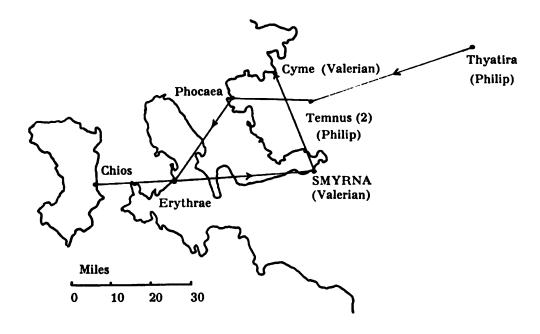


Fig. 7. Occurrence of Single Senate Obverse Die (ca. 246-256)

Given the clear practical advantages of autonomous types, how do we explain the variety of practice between areas and cities in striking them? Most of the non-portrait coins come from the Province of Asia, which probably has as much to do with the fact that it was the area most accustomed to producing its own bronze coinage in pre-imperial days as with its status as a senatorial province; it had the densest concentration of cities, so it is not surprising that it was there that the workshop system of coin production was most highly developed, with the consequences that we have seen for the adoption of autonomous types in some parts of the Province. Why certain cities, such as Ephesus, should have forgone the practical benefits of using autonomous types is baffling. It seems unlikely that there was any legal impediment.<sup>31</sup> There may not have been an explanation: Ephesus did not



<sup>&</sup>lt;sup>31</sup> Tom Jones makes an opaque reference to the autonomous issues in his article "Greek Imperials — A Numismatic Riddle," *Proceedings of the American Philosophical Society* 107 (1963), p. 342. In his discussion of the factors indicating an incipient currency crisis in the late second century A.D., he says "the rise in the number of

choose to strike games types either, except on a few isolated occasions, even though every other city that had games recorded them on their coinage; both choices may be arbitrary.

The conclusions from these investigations are therefore unavoidably negative: the "pseudo-autonomous" Greek Imperials are no different from any other Greek Imperials and their types have nothing to do with autonomy. It would be better if they were referred to simply as "coins without imperial heads" until a handy descriptive term is formulated. The ultimate moral of the tale is surely a good one for numismatists to keep in mind: there is not necessarily a deep significance lurking behind every coin type.

#### KEY TO PLATES

It has been impossible to give closely accurate dates for all the coins illustrated without studying the coinages of the individual cities in greater depth than time allows. A rough indication of date is given in order to give some idea of the variations in style over time. The reference in each case is to the relevant volume of BMC. I am very grateful to Andrew Burnett for supplying casts of the BM coins, and to Michel Amandry for nos. 56 and 72.

#### Local allusions

- 1. Samos, Ionia. BMC 222. Prow of samaina / Bearded term, CAMION. Second quarter of third century?
- 2. Stratonicea, Caria. BMC 38. Bellerophon, BEA / Altar, CTPATONIKEQN. First quarter of second century? (Contemporary with 59, compare lettering.)

issues bearing the imperial effigies in proportion to the issues of autonomous coins is another straw in the wind." Does he mean that there was greater imperial involvement in the coinage, reflected in the types, or does he mean that the imperial head made the coins more generally acceptable than they would have been with local types and therefore allowed the coins to circulate more widely? His statement could in any case be challenged on factual grounds in the Province of Asia where, as noted above, the activities of the workshops led to more widespread issues of autonomous coins in some areas at least.



- 3. Amastris, Paphlagonia. *BMC* 17. Homer, OMHPOC / Bust of City Tyche resembling Faustina I, AMACTPIC. Second quarter of second century.
- 4. Cos, Caria. *BMC* 213. Xenophon the Physician, ZENOΦΩN / Hygeia, KΩIΩN. Second quarter of third century.
- 5. Mytilene, Lesbos. *BMC* 174. Flavia Nicomachis, ΦΛΑ NEIKOMAXIC / Seated female figure (Flavia Nicomachis or her mother, Julia Procula?), MVTIΛΗΝΑΙΩΝ. Third quarter of second century. Flavia Nicomachis and her mother were benefactresses of the city, see *BMC*, pp. lxxiii-lxxiv.
- 6. Mytilene, Lesbos. *BMC* 160. Theophanes the Historian, ΘΕΟΦΑΝΗC ΘΕΟC, MYT / Bust of Archedamis (? wife of Theophanes), APXEΔAMIC ΘΕΑ. Early first century.
- 7. Mytilene, Lesbos. BMC 169. Sappho,  $\Psi A \Pi \Phi \Omega$  / Lyre, MYTI $\Lambda$ HNAI $\Omega$ N. First half of second century. (See BMC, pp. lxx-lxxi).
- 8. Ilium, Troas. BMC 24. Wolf and twins,  $|\Lambda|$  / Hector, EKKT $\Omega$ P [sic]. Last quarter of second to third century (Bellinger, Troy T 212).

# Personifications

- 9. Tralles, Lydia. BMC 104. Bust of female Senate, IEPA CYNKΛΗΤΟC / Agonistic table with wreath and prize crown, TPAΛΛΙΑΝΩΝ ΠΡΩΤΩΝ ΕΛΛΑΔΟC. Valerian (compare SNGv-Aulock 3279, Valerian [not same die, note palms in the prize crown]).
- 10. Aphrodisias, Caria. *BMC* 24. Demos, ΔHMOC / Aphrodite Eleutheria, ΑΦΡΟΔΕΙCΙΕΩΝ ΕΛΕΥΘΕΡΙΑ. First quarter of third century.
- 11. Aphrodisias, Caria. BMC 42. Boule, EIEPA BOVAH / Eros, A $\Phi$ PO $\Delta$ EICIE $\Omega$ N. First quarter of third century.
- 12. Hierapolis, Phrygia. BMC 79. Gerousia,  $\Gamma$ EPOVCIA / Rider god,  $\Gamma$ IEPA $\Gamma$ IO $\Lambda$ EI $\Gamma$ Q $\Omega$ N. Second half of second century.
- 13. Laodicea, Phrygia. BMC 130. Bust representing the Council of Young Men, CYNE PION NE $\Omega$ N/Eros,  $\Lambda$ AO $\Delta$ IKE $\Omega$ N NA $\Omega$ KOP $\Omega$ N Probably ca. 220.



#### Roma

- 14. Sala, Lydia. *BMC* 8. [Unidentified] bust of Roma in military dress, CAΛHNΩN / Cybele seated, EΠΙ ΑΛΕΖ ΙΕΡΕVC. Trajan (Alexander: see *SNGvAulock* 8251).
- 15. Pergamum, Mysia. BMC 211. Bust of Roma,  $\Theta$ EAN  $P\Omega$ MHN / Bust of Senate,  $\Theta$ EON CVN K $\Lambda$ HTON. Fourth quarter of first century.
- 16. Clazomenae, Ionia. *BMC* 113. Busts of Roma and the Senate, PΩMH, CVN KΛHTOC / Horseman, KΛAZOMENIΩN. First quarter of second century.
- Ilium, Troas. BMC 37, rev. Busts of Roma (turreted r.) and Senate, figure of Athena in military dress between, ΘΕΑ ΡΩΜΗ, IEPA CVN ΚΛΗΤΟC, IΛI. Caligula.
- 18. Silandus, Lydia. BMC 5. Bust of Roma in military dress,  $\Theta EA$   $P\Omega MH$  / Kore of Sardis,  $CI \Lambda AN \Delta E\Omega N$ . First quarter of third century.
- 19. Tripolis, Lydia. *BMC* 54. Bust of Roma draped, ΘΕΑΝ PΩMHN TPIΠOΛΕΙΤΑΙ / Trajan standing beside trophy, AV KAI TPAIANOC.
- 20. Ancyra, Phrygia. *BMC* 17. Bust of Roma wearing polos, ΘΕΑ PΩMH / Dionysus, AN KVPANΩN. Second-third quarter of second century (compare *SNGCop* 142, Faustina II).
- 21. Alabanda, Caria. BMC 20. Roma seated,  $\Theta EA$  P $\Omega MH$  / Wreath, ATE $\Lambda EIAC$  A $\Lambda ABAN\Delta E\Omega N$ . The date can be established from the countermark of a male head which is found on many of the coins of Septimius and family at Alabanda (see BMC 32-35, etc.).

### Imperial Family

- 22. Cyzicus, Mysia. *BMC* 175. Faustina II as Kore of Cyzicus, KΩPH CΩTEIPA KVZIKHNΩN / Reclining male figure flanked by emperor sacrificing and lyre player, KVZIKHNΩN NEΩKOPΩN.
- 23. Amastris, Paphlagonia. *BMC* 18. Faustina II wearing mural crown as City Tyche, AMACTPIC / Nike, CEBACTH. Third quarter of second century.
- 24. Nicopolis, Epirus. BMC 8. Head of Augustus, AV ΓΟΥ CTOC KTICTHC / Fortuna, NI ΚΟΠΟΛΕωC. Second quarter of second century.



- 25. Smyrna, Ionia. *BMC* 267. Busts of Livia and Senate, CEBACTH CVN ΚΛΗΤΟC ZMVPNAIωV ΙΕΡωΝΥΜΟC / Temple with statue of Tiberius, CEBACTOC TIBEPIOC ΕΠΙ ΠΕΤΡωΝΙΟΥ. Ca. 29–35.
- 26. Hierapolis Castabala, Cilicia. *BMC* 12. Dionysus, IEPAΠΟΛΙΤώΝ ΚΑCΤΑΒΑΛΕώΝ / Septimius standing, AVT ΚΑΙ Λ CEΠ CEVHPOC ΠΕΡ CE.

# Range of Denominations:

- (i) Smyrna, reign of Tiberius
- 27. Smyrna. *BMC* 120. Zeus seated, CTPA TI ΚΛΑVΔΙΟΥ CΩCAN ΔΡΟΥ ZMYPNAIΩN / Wreath, ΕΠΙΤΙ ΚΛΑVΔΙΟΥ ΙΕΡΩΝΟΜΟΥ.
- 28. Smyrna. *BMC* 122. Bust of Senate, ΘΕΟΝ CVN ΚΛΗΤΟΝ ZMYP / Temple, ΕΠΙ ΤΙ ΙΕΡΩΝΟΜΟΥ CΩCANΔΡΟC.
- 29. Smyrna. *BMC* 125. Nemesis, ΕΠΙ ΤΙ ΚΛΑVΔΙΟΥ ΙΕΡΩΝΟΜΟΥ River god. CTPA ΤΙ ΚΛΑV CΩCANΔΡΟΥ ZMYP.
- 30. Smyrna. *BMC* 129. Bull, CTPA CΩCANΔPOC ZMYP / Lighted altar, EΠΙ ΙΕΡΩΝΟΜΟΥ.
  - (ii) Bagis, reign of Domitian
- 31. Bagis, Lydia. BMC 19. Domitian,  $\Delta OMITIANOC$  KAICAP / Demeter, KAICAPE $\Omega N$  BATHN $\Omega N$ .
- 32. Bagis, Lydia. BM 1969/2-1-7. Senate, ΘΕΟΝ CVN ΚΛΗΤΟΝ / Roma seated 1., BA ΓΗΝΩΝ.
- 33. Bagis, Lydia. BMC 1. Men, KAICAPE $\Omega$ N / Humped bull, BA $\Gamma$ HN $\Omega$ N.
  - (iii) Left- and right-facing heads
- 34. Maeonia, Lydia. BMC 11. Zeus head l., ZEVC ΟΛΥΝΠΙΟC / Roma seated, ΕΠΙ ΡΟΥΦΟΥ MAIONΩN. Ca. 100. There are no portrait coins for Rufus, only a Senate (BMC 15) and a Heracles head l. (Berlin), but the date can be established approximately by comparison with very similar types at Sardis and Antioch ad Maeandrum, see Kraft pl. 96, 48-50.
- 35. Maeonia, Lydia. BMC 7. Zeus head r., ZEVC OAYMΠIOC / Roma seated, ΕΠΙ ΑΙ ΝΕΩΝΟC MAIONΩΝ (see Antoninus Pius, BMC 38, for magistrate).



#### Style

Smyrna, Senate (obverses only)

- 36. Smyrna. BM. ΘΕΟΝ CVN ΚΛΗΤΟΝ EMYP (Hieronymus son of Sosander: Tiberius).
- 37. Smyrna. BMC 151. IEPA CVN KΛΗΤΟC (Bion: Trajan, compare BMC 323-24).
- 38. Smyrna. *BMC* 222. Similar (Herakleides: Commodus, compare *BMC* 481–86).
- 39. Smyrna. *BMC* 233. Similar (three times neocorate, therefore post-214; obverse die as Kraft, pl. 9, 67 [Severus Alexander]).
- 40. Smyrna. BMC 247. Similar (Epictetus: Philip, compare BMC 452).

# Datable Types

- 41. Myrina, Aeolis. BMC 39. Telesphorus / Lyre, MVPEINAI $\Omega$ N. Third century. Spelling MVPEINAI $\Omega$ N in third, MVPINAI $\Omega$ N in second century.
- 42. Bria, Phrygia. BMC 1. Sarapis / Isis, BPIAN $\Omega$ N. First quarter of third century.
- 43. Daldis, Lydia. BMC 1. Demos,  $\Delta A \wedge \Delta IAN\Omega N$  / Artemis Ephesia without stags, EIII MENEKPATOV. Flavian.
- 44. Nacrasa, Lydia. BMC 3. Senate,  $\Theta$ EON CVN K $\Lambda$ HTON / Artemis Ephesia with stags, NA KPACIT $\Omega$ N. First quarter of second century.

#### Datable Series

- 45. Acrasus, Lydia. BMC 9. Heracles / Lion.
- 46. Attalea, Lydia. BMC 14. Heracles (die of Acrasus, BMC 9) / Lion.
- 47. Gordus-Julia, Lydia. BMC 16. Heracles / Telesphorus.
- 48. Attalea, Lydia. BMC 11. Roma / Lion.
- 49. Acrasus, Lydia. BMC 13. Roma / Telesphorus.

#### Die Links

- 50. Thyatira, Lydia. BMC 48. Senate, IEPA CVN KΛΗΤΟC / Selene-Hekate, ΘVATEIPHNΩN. ca. 200.
- 51. Saitta, Lydia. BMC 20. Senate (die of Thyatira, BMC 48) / Cybele seated, ETI COC XAPIKAEOVC AP CAITTHN $\Omega$ N. Caracalla (compare no. 52 for magistrate).



- 52. Saitta, Lydia. BMC 50. Caracalla [not Elagabalus, as BMC] / Temple with Aphrodite, EΠΙ COC XAPIKΛΕΟVC APX A T B CAITTHNΩN.
- 53. Blaundus, Lydia. BMC 58. Boule, IEPA BOVAH / Dionysus, BAAVN $\Delta$ E $\Omega$ N MAKE. Philip.
- 54. Tripolis, Lydia. BMC 39. Boule (die of Blaundus, BMC 58) / Demeter, TPI $\PiO\Lambda$ EI $\OmegaO\Lambda$ EI $\PiO\Lambda$ EI $\OmegaO\Lambda$ E
- 55. Hierapolis, Phrygia. BMC 46. Apollo Archegetes, APXH  $\Gamma$ ETHC/ Tyche, IEPA $\Pi$ O $\Lambda$ EIT $\Omega$ N NE $\Omega$ KOP $\Omega$ N Elagabalus (see n. 20).
- 56. Hierapolis, Phrygia. Paris 1337a. Elagabalus / Tyche (die of BMC 46).

#### Authorities

- 57. Alexandria Troas. *BMC* 39. Bust of City, CO ALEX TRO / Apollo Smintheus, COL AVG TROAD. Second quarter of third century. ALEX was adopted following Caracalla's visit in 214, though Bellinger (p. 147) doubts the validity of this rule for the autonomous issues for no good reason.
- 58. Beroia, Macedonia. BM 1897/3-5-47. Alexander the Great, A $\Lambda$ EXAN $\Delta$ POV / Youth standing beside prize table, KOI MAKE B NE $\Omega$  BEPAI $\Omega$ N, dated in field EOC (275) = AD 243/4.
- 59. Stratonicea, Caria. BMC 42. Zeus as horseman, CTPATONIKEQN Hecate riding lion,  $\Psi H \Phi I CAMENOY \Phi \Lambda ABIOY \Delta IOMH \Delta OVC$ . First quarter of second century.
- 60. Aphrodisias, Caria. BMC 54. Boule, BOYAH AΦΡΟΔΕΙΣΙΕϢΝ / Nemesis, ΕΠΙΜΕΛΗΘΕΝΤΟΣ ΑΜΥϢΝΟΣ ΑΡ.... Tiberius (compare BMC 99ff.).
- 61. Aphrodisias, Caria. BMC 55. Senate, IEPA CVN KAHTOC / Birth of Adonis, TI KA ZHN $\Omega$ N ANE[ $\Theta$ H KE] A $\Phi$ PO $\Delta$ ICIE $\Omega$ N. Severan (compare BMC 115–16, Julia Domna, also signed by Zeno).
- 62. Temnus, Aeolis. BM 1961/3--1-220. Bust of C. Asinius Gallus (proconsul 6-5 B.C.), ACINIOC ΓΑΛΛΟC ΑΓΝΟC / Dionysus, ΑΠΟΛΛΑC ΦΑΙΝΙΟΥ ΤΑΜΝΙΤΑΝ.
- Hierocaesarea, Lydia. BMC 19. City Tyche, IEPO KAICAPEIA / Perseus, ANΘΥΠΑΤΩΦΕΡΟΚΙ (T. Julius Ferox, proconsul 116– 17).



64. Mytilene, Lesbos. BMC 233. Zeus Ammon,  $\Theta$ EOC AMM $\Omega$ N / Tyche of Mytilene and Asclepius of Pergamum, E $\Pi$ I C. BAA APICTOMAXOV OMO MVTIAHNAI $\Omega$  K  $\Pi$ EP  $\Gamma$ AMH. Valerian (compare BMC 223–31).

#### Free Cities

- 65. Termessus, Pisidia. BMC 45. Zeus, TEPMHCCE $\Omega$ N / Genius, AVTONOM $\Omega$ N. Third quarter, third century.
- 66. Chios, Ionia. BMC 126. Sphinx,  $XI\Omega N$  / Two thyrsoi, ACCAPION HMYCY. First quarter, second century.
- 67. Athens. BM 1902/12-1-29. Athena / Bucranium, AΘHNAIΩN. Second half of second century.
- 68. Amisus, Pontus. BMC 95. Caracalla / Emperor and Nike, AMICOV ENEVOEPAC, dated in ex. ET CMH (248) = A.D. 215.
- 69. Corycus, Cilicia. BMC 16. Gordian III / Poseidon,  $K\Omega PVK I\Omega T\Omega N$  AVTONO[M $\Omega N$ ].
- 70. Corycus, Cilicia. BMC 11. Bust of City,  $K\Omega PYKI\Omega T\Omega N$  / Poseidon, AVTONOM $\Omega N$ . Third century.

# Re-Use of Dies

- 71. Sardis, Lydia. *BMC* 89. Bust of City, ACIAC ΛVΔIAC ΕΛΛΑΔΟC A MHTΡΟΠΟΛΙΟ CAPΔΙΟ / Rape of Persephone, ΕΠΙ COVΛ ΕΡΜΟΦΙΛΟV APX A T B CAPΔΙΑΝΩΝ B ΝΕΩΚΟΡΩΝ. Gordian III (for magistrate compare *BMC* 187).
- 72. Sardis, Lydia. Paris 1315. Die of BMC 89 / Zeus seated within arc, EIII  $\Delta$ OM] POY $\Phi$ OV [ACIAPX] CAP $\Delta$ IAN $\Omega$ N  $\Gamma$  NE $\Omega$ KOP $\Omega$ N Valerian (for magistrate compare BMC 206).



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# THE MEANING AND DATE OF THE REVERSE TYPE OF GAIUS CAESAR ON HORSEBACK

(Plate 39)

JOHN POLLINI

Appearing on the reverse of an Augustan series of aurei and denarii of the mint of Lugdunum is a youthful figure on horseback galloping to the right (Plate 39, 1-3). The legend C. CAES above the figure and AUGUS. F in the exergue clearly identifies the horseman as Gaius Caesar, the eldest grandson and adopted son of Augustus. Gaius wears a short military tunic and a bulla around his neck. He bears a round shield on his left arm, brandishes a lance or sword in his left hand, and grasps the horse's reins in his right hand. In the background to the left appear three military standards: the aquila of the entire legion, flanked by the signa of the maniples. The obverse bears the laureate head of Augustus with the legend AUGUSTUS DIVI F.

1 In several catalogues Gaius is incorrectly described as holding a sword in his right hand: BMCRR 2, p. 443, no. 221; BMCRE 1, p. 85, no. 498; A. Banti and L. Simonetti, Corpus Nummorum Romanorum 4 (Florence, 1974), p. 64, no. 22; 5 (Florence, 1974), p. 18, no. 343. It is difficult to determine whether Gaius was meant to be represented with a lance or a sword in his left hand. Both weapons would be appropriate for horsemen: P. Couissin, Les armes romaines (Paris, 1926), pp. 312-13 (sword), and 479 (lance). In actual practice, however, it would make less sense to brandish a sword in the left hand while wearing a shield on this arm than it would to carry a lance in this manner. But if a lance were intended, it seems to be represented inaccurately, since the shaft does not appear to extend below Gaius's forearm in any known example of this coin.



The particular event commemorated by the reverse type of Gaius on horseback and the date of this issue have been matters of some debate. The most generally accepted view is that the reverse scene alludes to Gaius's first participation at the age of twelve in 8 B.C. in military exercises with the Rhine legions (Dio Cass. 55.6.4) and that the issue therefore dates to that year or shortly thereafter.2 According to another interpretation, which has gained little following, the scene of Gaius on horseback refers to the equites' bestowal upon him of the title Princeps Iuventutis in 5 B.C.,3 an honor which also accorded him the privilege of commanding a division of cavalry (Res Gestae 14.2, Dio Cass. 55.9.9 [Zonaras]). Thus, if the reverse scene did in fact allude to Gaius's becoming Princeps Iuventutis, we would expect the vexillum of the cavalry to be represented, rather than just the legionary eagle and the signa of the maniples.4 The absence of the vexillum therefore argues against there being any intended reference here to Gaius's becoming Princeps Iuventutis in 5 B.C. and against an associated dating of these aurei and denarii to 5-3 B.C. Most recently, it has been suggested that the reverse type commemorates an event of 2 B.C.—Gaius's departure from the newly dedicated Forum of Augustus to assume his first mili-



<sup>&</sup>lt;sup>2</sup> BMCRE 1, pp. cxiii, cxvi, and 85-86, nos. 498-503, pl. 12, 15, 18-19 (8 B.C.?); RIC 1, pp. 48 and 89, nos. 348-49 (8-6 B.C.); C. H. V. Sutherland, Coinage in Roman Imperial Policy (London, 1951), pp. 68-69 and 205, pl. 5, 18 (ca. 8-7 B.C.), who indicates incorrectly that Gaius was in his fourteenth year in 8 B.C.; A. S. Robertson, Roman Imperial Coins in the Hunter Coin Cabinet 1 (Oxford, 1962) pp. xlii and 40-41, nos. 213-15, pl. 7 (ca. 8 B.C.); Banti and Simonetti (above, n. 1) 4, pp. 64-66, nos. 22-25); 5, pp. 18-21, nos. 343-46; J.-B. Giard, Catalogue des monnaies de l'empire romain I Auguste (Paris, 1976), pp. 17 and 208-10, nos. 1457-69, pl. 60 (8 B.C.), and Le monnayage de l'atelier de Lyon (Wetteren, Belgium, 1983), pp. 41-42 and 96-97, nos. 68-70, pls. 17-18 (8 B.C.). For further discussion and additional references: F. E. Romer, "A Numismatic Date for the Departure of C. Caesar?" TAPA 108 (1978), pp. 187-91.

<sup>&</sup>lt;sup>3</sup> H. A. Grueber, *BMCRR* 2, pp. 413 44, nos. 221-25, pl. 109, 13-14, following Count de Salis, although Grueber also sees this issue as perhaps dating to 8 B.C. For additional references: Romer (above, n. 2), p. 188, n. 3.

<sup>&</sup>lt;sup>4</sup> On the various types of Roman standards: A. v. Domaszewski, "Die Fahnen in römischen Heere," Abhandlungen des archäologisch-epigraphischen Seminars der Universität Wien 5 (1885) (rpt. in Aufsätze zur römischen Heeresgeschichte [Darmstadt, 1972], pp. 1-80). See further H. M. D. Parker, The Roman Legions (Oxford, 1928), pp. 42 and 210-11; G. Webster, The Roman Imperial Army (London, 1969), pp. 139-40.

tary command.<sup>5</sup> It would seem that Gaius was accorded the special honor of being the first of those who would henceforth set out from the Forum Augustum to take up their commands in the provinces. The three standards represented in the background of the reverse scene are explained as a direct reference to the Roman standards lost to Parthia and recovered by Augustus in 20 B.C. Those standards, which had been kept on the Capitoline, were transferred to the Forum Augustum by the time of its dedication in 2 B.C. The appearance of the recovered standards on the Lugdunum series would therefore serve a two-fold purpose: they would symbolize the Forum Augustum from which Gaius set out for his Eastern mission in 2 B.C. and would call to mind that Gaius, like Augustus before him, would gain great glory in settling recent disputes with Parthia.

However attractive the last interpretation might be, two important factors argue against it. One of these is the obverse die linkage which J.-B. Giard has established between the series with Gaius on horseback and another series of aurei and denarii from the Lugdunum mint showing on the reverse Augustus receiving a child from a barbarian. The appearance of IMP XIIII on the reverse of this last mentioned series establishes a *terminus post quem* of 8 B.C. The delivering up of the child to Augustus by the barbarian must refer to the German overtures of peace in 8 B.C. following Tiberius's successful German campaign (Dio Cass. 5.6.1-3). Although Augustus did not receive his fifteenth salutation as *imperator* until about A.D. 1,7 Giard concludes from all his evidence that the series with Gaius on horseback and that with



<sup>&</sup>lt;sup>5</sup> Romer (above, n. 2), pp. 187-202, with an excellent treatment of the past literature on the problem of the event commemorated and the date of this issue, as well as insightful observations about the significance of the dedication of the Forum Augustum in the dynastic propaganda of Augustus. H. Cohen, Description historique des monnaies frappées sous l'empire romain communément appelées médailles impériales 1 (Paris, 1880), pp. 68-69, nos. 38 41, dates this issue toward 2 B.C. without explanation.

<sup>6</sup> Giard, Catalogue (above, n. 2), p. 17, no. 208, and Monnayage (above, n. 2), 41-42.

<sup>&</sup>lt;sup>7</sup> On this matter: T. Barnes, "The Victories of Augustus," *JRS* 1974, p. 23; R. Syme, *History in Ovid* (Oxford, 1978), p. 11; F. E. Romer, "Gaius Caesar's Military Diplomacy in the East," *TAPA* 109 (1979), p. 208.

Augustus receiving a child from a barbarian were probably produced simultaneously in 8 B.C.8

The second factor arguing against a dating to 2 B.C. (or to 5 B.C.) is the bulla which Gaius wears around his neck. Attention has not been focused upon this extremely important piece of evidence in previous studies of this series of coins. On these coins the bulla is circular in shape and suspended from a thick strap knotted behind the neck. Though somewhat exaggerated in size, Gaius's bulla thus resembles those known to us in extant ancient examples and from other representations in Roman art (see, e.g., Plate 39, 4). It was Roman custom for a boy to wear the bulla until he reached the state of manhood, at which time he dedicated his bulla to the Lares, put aside the loga praetexla, and assumed the loga virilis. It was in 5 B.C. that Gaius assumed the loga virilis (Dio Cass. 55.9.9 [Zonaras], IGRR 4, 1756.23-26) and, as already noted, became Princeps Iuventutis. And since he is

- <sup>8</sup> On Giard's findings, A. Burnett, "Catalogues, Coins, and Mints," *JRS* (1978), p. 176, comments: "These links do not prove contemporaneity, but they make it quite possible."
- <sup>9</sup> Giard, Catalogue (above, n. 2), p. 209, and Monnayage (above, n. 2), p. 96, notes the presence of the bulla in his description of this coin type, but does not comment on its significance.
- <sup>10</sup> For representations of actual bullae: G. Becatti, Oreficerie antiche (Rome, 1955), p. 214, nos. 506-7), pl. 144, P. G. Warden, "Bullae, Roman Custom and Italic Tradition," Opuscula Romana 14 (1983), pp. 69-75, figs. 1-5; M. Cristofani and M. Martelli, L'oro degli Etruschi (Novara, 1983), p. 316, fig. 267 (from Ostia and probably of Augustan date).
- 11 Plate 39, 4: statue of a youthful member of the Julio-Claudian family from the "Basilica" at Otricoli (Italy), now in the Vatican Museum (Galleria dei Candelabri IV, 93); G. Dareggi, "Il ciclo statuario della 'basilica' di Otricoli: la fase giulioclaudia," Bollettino d'Arte 67 (1982), 16-18, figs. 25-27, with extensive bibliography. Although the identification of this figure has been much disputed, the statue represents in my opinion one of the elder sons of Germanicus, probably Nero Iulius; for this portrait type so identified, see recently D. Kaspar in H. Jucker and D. Willers, eds. Gesichter<sup>3</sup> (Bern, 1983), pp. 80-81. For the representation of boys wearing the bulla in Augustan relief art, see especially the processional friezes of the Ara Pacis (e.g., E. Simon, Ara Pacis Augustae [Greenwich, Conn., 1967], pl. 15 [the bulla of the child on the left is restored in part]).
- <sup>12</sup> For the laying aside of the *bulla* and *loga praetexta* and the assumption of the *loga virilis*, see especially Prop. 4.1.131-32 and Pers. 5.30-33; see further *RE* 3, s.v. "Bulla," cols. 1047-51 (Mau).



represented still wearing the bulla on the aurei and denarii in question, these coins must celebrate an event antedating 5 B.C. In view of this fact and the findings of Giard, it can no longer be doubted that the reverse type of Gaius on horseback refers to his participation in military exercises with the Rhine legions in 8 B.C. Given the event commemorated, it is very likely that this coinage made up—at least in part—the special donative which Dio Cassius (55.6.4) indicates Augustus granted to the soldiers in 8 B.C. to celebrate Gaius's activities with them.<sup>13</sup> It is in any case reasonable to conclude that this series was minted in that year or shortly thereafter.

<sup>13</sup> See also Sutherland (above, n. 2), p. 68.

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# MAXENTIAN HOARDS AND THE MINT AT OSTIA

(PLATE 40)

FRED C. ALBERTSON

In A.D. 309 the emperor Maxentius established a new mint at Ostia, Rome's port city at the mouth of the Tiber River. The decision to place this mint in geographical proximity to the long-standing mint at Rome raises some important questions regarding mint location, the regulation of mint output, and the circulation of coinage under Maxentius. On the basis of hoard evidence and information provided by certain Ostian issues, it will be shown that Ostia does not conform to the traditional concept of a Tetrarchic mint, that is, begun and operated for the distribution of coinage to designated areas, particularly those with a high concentration of bureaucratic and military personnel.<sup>1</sup> In the case of Ostia, political rather than economic and military reasons were of primary importance. The establishment of the Ostian mint was part of an overall plan of Maxentius to centralize the mint operation near Rome and yet ensure the continued production of gold and silver coinage outside the unstable and unfavorable political climate of the capital.

<sup>1</sup> C. H. V. Sutherland, Roman Imperial Coinage, vol. 6. From Diocletian's Reform (A.D. 294) to the Death of Maximinus (A.D. 313) (London, 1967), pp. 10-11; cited hereafter as RIC 6. This paper is the result of research conducted at the 1982 Graduate Seminar at the American Numismatic Society. I would like to express my appreciation to William E. Metcalf and Andrew Burnett for their invaluable assistance. My special thanks go to Theodore Buttrey for his help in the preparation of this final draft.



#### CHRONOLOGY OF THE OSTIAN MINT UNDER MAXENTIUS

Before discussing the coins of the Ostian mint, it will be useful to review the chronologies of the other mints in operation under Maxentius.<sup>2</sup> Following the successive defeats of Severus and Galerius in the spring and early summer of 307, the mints under control of Maxentius would have included Rome in the diocese of Suburbicaria, Ticinum and Aquileia in Italia Annonaria, and Carthage in Africa.

At the Rome mint, bronze folles were reduced in the summer of 307 to a median of 6.5 g from the previous 8.5 g. The first reduced series bears the mint mark  $\overline{\text{RP-Q}}$  in the exergue, soon followed by a second series denoted  $\overline{\text{R*P-Q}}$ . The obverse portraits include Maxentius and Maximian as Augusti and Constantine as Caesar. The reverse type shows the goddess Roma in her temple with the legend CONSERVATORES VRB(IS) SVAE (Plate 40, 1).<sup>3</sup> This legend is shortened to CONSERV VRB SVAE by the end of 307 and coincides with the alteration of the mint mark to  $\frac{H}{RP-Q}$ .<sup>4</sup> The legend CONSERV VRB SVAE with

Roma in her temple remained the primary reverse type for the bronze coinage of the Rome mint throughout its operation under Maxentius. Successive issues of RBP-Q from 308-10 and REP-Q from 310-12 repeat this shortened form.<sup>5</sup>

Beginning in the summer of 307 the mint at Carthage also struck a similar issue of reduced-weight folles with a personification of Carthage in a temple with the legend CONSERVATORES KART(HAGINIS) SVAE.<sup>6</sup>



The following outline of Maxentian coinage summarizes the arguments presented by Sutherland, RIC 6, in the introductions to the mints of Ticinum (pp. 271-77), Aquileia (pp. 305-8), Rome (pp. 338-47), Ostia (pp. 393-97), and Carthage (pp. 416-19). It is Sutherland's chronology, clearly supported by the hoard evidence, which appears in Table 1. Further studies are provided by R. A. G. Carson and J. P. C. Kent, "Constantinian Hoards and Other Studies in the Later Roman Bronze Coinage," NC 1956, pp. 83-161; C. King, "The Maxentian Mints," NC 1959, pp. 47-78; and most recently A. Jeločnik, The Čentur Hoard: Folles of Maxentius and the Tetrarchy, Situla 12 (Ljubljana, 1973).

<sup>&</sup>lt;sup>3</sup> RIC 6, p. 371, 162–65; p. 376, 194–201.

<sup>4</sup> RIC 6, p. 377, 202-5.

<sup>&</sup>lt;sup>5</sup> RIC 6, p. 378, 208-12; pp. 382-83, 258-63.

<sup>&</sup>lt;sup>6</sup> RIC 6, p. 432, 59-61.

As early as September of that same year, however, the Carthage mint was closed. This conclusion is based on the absence of any coins from this mint bearing the legend of Constantine as Augustus, a title which he adopted in July of 307 and which appears on the coins of Maxentius's Italian mints beginning in the fall.<sup>7</sup>

In northern Italy reduced-weight folles bearing the obverse portrait of Maxentius as Augustus appeared at Ticinum beginning in the summer of 307. As at Rome, the primary issue of bronze is the CONSERVA-TORES VRB(IS) SVAE reverse.8 At Aquileia unreduced folles continued until the weight reduction in the late summer or early fall, when the CONSERV VRB SVAE reverse type appears for the first time. Later, in 310, the mints at Aquileia and Ticinum appear to have decreased production and eventually shut down altogether. Only one coin is known from Ticinum which announces Maxentius's third consulship beginning on 1 January 310,10 while there are no examples from Aquileia. A single fractional follis commemorating the quinquennalia of Maxentius, dated to October 310, can be attributed to Aquileia; the coin bears only a  $\Gamma$  as the mint mark but can be assigned to Aquileia where the officinae are designated as AQP, AQS and AQI. Neither of the North Italian mints produced any of the commemorative issues to Divus Romulus, Maxentius's son (died late 309), Divus Maximian (d. early 310), or Divus Galerius (d. May 311).12 One must add, however, that the closing of these two mints is assumed only e silentio. Although neither mint produced any folles other than the CONSER-



<sup>&</sup>lt;sup>7</sup> The traditional date for Constantine's assumption of the title of Augustus is 31 March 307. For Sutherland's July date see *RIC* 6, pp. 12-14. Coins of the Italian mints with the earliest designation of Constantine as Augustus: *RIC* 6 (Ticinum), p. 294, 93; (Aquileia), p. 326, 120, 121c; (Rome), p. 376, 197, 201. The closure of the Carthage mint is dated to the summer or fall of 307 in all recent studies: King (above, n. 2), p. 62; Sutherland, *RIC* 6, pp. 417 and 419; Jeločnik (above, n. 2), p. 141.

<sup>&</sup>lt;sup>8</sup> RIC 6, p. 293, 84-86.

<sup>&</sup>lt;sup>9</sup> RIC 6, p. 325, 113-18a.

<sup>&</sup>lt;sup>10</sup> I.. Laffranchi, "Il III consolato di Massenzio su di una moneta della zecca di Ticinum," RIN 31 (1918), pp. 117–20, fig. 3. This coin is reportedly from the Belinzaga hoard, discovered near Milan in 1877 (NScavAnl [1877], p. 101) and dispersed shortly afterward. Not listed in RIC 6.

<sup>&</sup>lt;sup>11</sup> RIC 6, p. 326, 128.

<sup>&</sup>lt;sup>12</sup> The Divi series of the Tetrarchic period are discussed by P. Bastien, "Aeternae Memoriae Galeri Maximiani," RBN 114 (1968), pp. 15-43, esp. 18-21.

V(ATORES) VRB SVAE reverse, it is possible that production of this type may have continued, as at Rome, past 310. Yet the lack of obverse legends with COS III at Aquileia and only one specimen from Ticinum is unusual, since COS I and COS II folles were previously struck in quantity.<sup>13</sup> The closing of both North Italian mints sometime in 310 therefore seems certain.

Between the closings of the mint at Carthage in 307 and of those at Ticinum and Aquileia in 310, the new mint at Ostia was established. The earliest issues from this mint seem to have been in gold and silver only.<sup>14</sup> All gold coinage at Ostia from its foundation to October 312 bears the mark POST. One of the earliest gold issues is a CONSERVA-TOR VRBIS SVAE reverse which depicts the familiar seated Roma holding a globe with Victory but lacking the temple as background (Plate 40, 5).15 The same type appears in Rome on two issues of aurei dating to 306 and 307.16 This is the only instance at Ostia of the type which was so popular on the folles of other Maxentian mints. Another early issue of aurei from Ostia is the TEMPORVM FELICITAS AVG N reverse with the she-wolf nursing the twins, while the obverse shows the facing bust of Maxentius, a portrait common on the aurei of Ostia but unusual elsewhere (Plate 40, 6).17 The same reverse type appears on what must be a contemporary silver issue from Ostia with the mint mark  $\overline{POST}\Gamma$ . The mark  $\overline{POST}\Delta$  is found on two other reverse types of silver: MARTI PROPAGATORI AVG N with Mars presenting a globe with Victory to Maxentius and the shortened MARTI PROPAG IMP AVG N with Mars and a female figure flanking the she-wolf and twins (Plate 40, 10). If two workshops were striking with  $\Gamma$  and  $\Delta$  as officing designations, one can only surmise that officinae A and B were also in



<sup>&</sup>lt;sup>13</sup> RIC 6 (Ticinum), p. 295, 102 4, 107; (Aquileia), p. 326, 119, 123-26.

 $<sup>^{14}</sup>$  Suggested as a possibility by Sutherland, RIC 6, p. 396, although the catalogue entries in all three metals read 308/9-October 312.

<sup>&</sup>lt;sup>15</sup> RIC 6, p. 400, 2.

<sup>&</sup>lt;sup>16</sup> RIC 6, p. 367, 135; p. 369, 143-44, pl. 6; p. 374, 177-78.

<sup>17</sup> RIC 6, p. 401, 5.

<sup>&</sup>lt;sup>18</sup> RIC 6, p. 402, 13 (listed by Sutherland as unauthenticated); J. Maurice, "L'atelier monétaire d'Ostia pendant la période constantinienne sous les règnes de Maxence et de Constantin," RIN 15 (1902), p. 51, 3, pl. 4, 15.

<sup>&</sup>lt;sup>19</sup> RIC 6, p. 402, 11-12; J. Maurice (above, n. 18), pp. 50-51, 2, pl. 4, 13.

production despite the absence of any authenticated coins bearing those marks. Thus, the Ostian mint must have opened with four workshops in production, presumably A striking in gold and possibly silver, B,  $\Gamma$  and  $\Delta$  in silver only.<sup>20</sup>

Although the reverse types of the argentei do not change, the mint mark is altered to  $\overline{\text{MOSTA}}$ - $\Delta$  with the same four officinae. Examples of the reverse type MARTI PROPAG IMP AVG N are known with  $\overline{\text{MOSTB}}$ ,  $\overline{\text{MOST}\Gamma}$  and  $\overline{\text{MOST}\Delta}$ ,  $\overline{\text{21}}$  TEMPORVM FELICITAS with  $\overline{\text{MOSTA}}$  and  $\overline{\text{MOSTB}}$ . No examples with the longer legend MARTI PROPAGATORI occur in the  $\overline{\text{MOSTA}}$ - $\Delta$  series, which would support the placement of this mint mark after  $\overline{\text{POST}(A)}$ - $\Delta$ .

The change in mint mark on the argentei to  $\overline{MOSTA}$ - $\Delta$  must coincide with the first striking at Ostia of bronze folles with the same Greek lettered officinae MOSTA-\Delta. A new reverse type is also introduced on the bronze coinage, a type which will remain the primary issue of the Ostian mint. The reverse legend AETERNITAS AVG N frames the two Dioscuri standing on each side of the Lupa Romana nursing the twins Romulus and Remus (Plate 40, 2); later issues of this type with the same mint mark omit the wolf and twins altogether.23 The MOST series with workshops denoted in Greek letters is supplanted by a second series with Latin letters, MOSTP-Q. The **AETERNITAS-**Dioscuri type of this new series also omits the wolf and twins from the reverse (Plate 40, 3),<sup>24</sup> which supports the ordering of the series with MOSTA- $\Delta$ followed by MOSTP-Q. In addition, commemorative coins to Divus Romulus, who died in late 309, appear in the Latin-lettered series but are absent from the Greek-lettered coinage.25



<sup>&</sup>lt;sup>20</sup> The mint at Rome from 306 to 307 also had one workshop striking in gold and three other workshops, designated S, T and Q, striking in silver: *RIC* 6, pp. 340-41 and 342.

<sup>&</sup>lt;sup>21</sup> RIC 6, p. 402, no. 11, pl. 7 (MOSTΓ in Oxford; Sutherland also lists a MOSTΔ in Vienna); Maurice (above, n. 18), pl. 4, 12 (MOSTB).

<sup>&</sup>lt;sup>22</sup> RIC 6, p. 402, 13, pl. 7 (MOSTA); Maurice (above, n. 18), pl. 4, 14 (MOSTB).

<sup>&</sup>lt;sup>23</sup> RIC 6, p. 403, 16-19, pl. 7 (with wolf); p. 403, 14-15 (without wolf).

<sup>&</sup>lt;sup>24</sup> RIC 6, p. 404, 35-38.

<sup>25</sup> RIC 6, p. 404, 32-34.

Thus, we arrive at the following relative chronology for the Ostia coinage:

Gold	Silver	Bronze
POST	POST(A)-Δ	none
POST	MOSTA-∆	MOSTA-Δ
POST	none	MOSTP-Q

Unfortunately, these issues can be given only approximate dates. A date after May 308 for the opening of the mint is certain. At that time, Maximian led an unsuccessful coup against his son and was forced to flee to the protection of Constantine in Gaul. This break between Maxentius and his father is reflected on the coinage, for Maximian and Constantine no longer appear on the coinage of the Italian mints. At Rome the series  $\frac{H}{RP-Q}$  was replaced by a new series bearing the mint mark  $\overline{RBP-Q}$  which does not include obverse portraits of Maximian or Constantine. Since neither of these two emperors appears on coins of the mint at Ostia, production must have begun after May 308.

A terminus ante quem of late 309 or early 310 is established by the Divus Romulus issue with the mint designation MOSTP-Q.27 The single known gold multiple issued at Ostia, which survives today only as a cast, belongs to the same series and certainly must have been part of an inaugural issue of this commemorative group.28



<sup>&</sup>lt;sup>26</sup> RIC 6, p. 377, 202-5; pp. 377-79, 206-25.

<sup>&</sup>lt;sup>27</sup> RIC 6, p. 404, 34, pl. 7. This series could have appeared any time after the death of Romulus in late 309. At Rome, for example, Divus Romulus coinage continued as late as 311 on issues with the REP-Q mint mark (RIC 6, p. 382, 249, and 256-57). This Ostian series, however, belongs to an early type where the shrine on the reverse appears without columns. This is the only form of the shrine found at Rome on issues struck RBP-Q, a mint mark discontinued by the fall of 310 if not slightly earlier. Later varieties of the shrine, either hexastyle or tetrastyle, on the Divus Romulus series are certainly influenced by the reverse types of Divus Maximianus, Divus Constantius, and Divus Galerius issues. See P. Bastien (above, n. 12), p. 19.

<sup>&</sup>lt;sup>28</sup> RIC 6, p. 400, 1 (authenticity "plainly uncertain"); M. Alföldi, Die constantinische Goldprägung (Mainz, 1963), pl. 2, 33.

Thus, one can assign only a general date for the beginning of Ostian coinage. The third and last series,  $\overline{\text{MOSTP-Q}}$ , may have been in circulation by the fall of 309 or early 310 as shown by the Divus Romulus series.  $\overline{\text{MOSTA-}}\Delta$  which contains both silver and bronze issues appears to be short-lived. This is shown by the Italian and Čentur hoards (closed summer 310) where the Latin series numerically dominates (see Table 1). If we assign this series to the summer of 309 and set the previous issue of  $\overline{\text{POST}}(A)$ - $\Delta$  somewhat earlier, a date of early to mid 309 seems likely for the opening of the mint.<sup>29</sup>

#### ESTABLISHMENT OF THE MINT AT OSTIA

Previous explanations for the creation of the mint at Ostia are linked closely with the revolt in Africa in June or July of 308 under Domitius Alexander. At that time, the provinces of Africa Proconsularis, Byzacena, and Numidia seceded and cut off Rome's major source of grain.<sup>30</sup>

R. A. G. Carson and J. P. C. Kent claim that the Ostian mint was merely the personnel at Carthage transferred to Italy due to the uncertainties of the political situation in Africa.<sup>31</sup> However, if we compare the technical and stylistic traits of the coins from Carthage with those of Ostia, a different conclusion can be reached. The folles from Carthage are consistently smaller in the module dimension of the die field, with a median diameter of 23.2 to 23.6 mm compared to 23.8 to



<sup>&</sup>lt;sup>29</sup> Carson and Kent (above, n. 2), p. 117: second half of 308; King (above, n. 2), p. 62: late 308 to early 309; Jeločnik (above, n. 2), p. 144: end of 308.

<sup>&</sup>lt;sup>30</sup> For the most recent discussion of the revolt and its chronology, see R. Andreotti, "Problemi di epigrafia Costantiniana I: La presunta alleanza con l'usurpatore Lucio Domizio Alessandro," *Epigraphica* 31 (1969), pp. 144-80. Concerning the identification of the provinces which revolted, see especially p. 157, 28 29. A date of late summer to fall of 310 for the suppression of this revolt is accepted, following A. Castagnol, *Les fastes de la préfecture de Rome au bas-empire* (Paris, 1962), pp. 55-56, as opposed to the spring 311 date commonly proposed.

<sup>31</sup> Carson and Kent (above, n. 2), p. 116. Supported by L. Cope, "Die-Module Measurements and the Sequence of Constantine's Reformed Folles Issues of Spring A.D. 310 and of Early A.D. 313," SM 20 (1970), p. 51, n. 16, who argues however that the personnel came to Ostia from Carthage via the Rome mint.

24.2 for the Ostian MOSTA-Δ series.<sup>22</sup> As a result, the design of the reverse field and the portraits of the obverse tend to be smaller in size at Carthage. Yet, the portraits on the Carthage coins tend to be in higher relief and more expressively modeled than their Ostian counterparts, which are rendered with sharper, more linear contours. Ostian die engravers show a heavy use of the drill or punch in the execution of reverse dies; the engravers of Carthage do not. In addition, the folles of Carthage are characterized by a thick, rough edge created by a particular process employed in cutting the dies, a technique not found on Ostian folles which are thinner and smoother.<sup>33</sup> The Ostian coinage in every instance mentioned bears a closer resemblance to examples from Rome, specifically the concurrent RBP-Q series. This suggests that personnel from Rome, not Carthage, were transferred to Ostia. It will be shown below that the die engraver for aurei at Ostia was the same individual who engraved the earlier gold coinage at Rome.

A. Jeločnik argues that the Ostian mint was created to supply coinage for the invasion of Africa.<sup>34</sup> He supports this theory by citing the reverse type on the main issue of folles from the first Ostian series (Plate 40, 2): the Dioscuri are depicted in their role as patrons of seamen watching over and protecting Rome in the same manner as the merchants and sailors of Ostia are overseeing preparations for the invasion of Africa. However, this interpretation disregards the accompanying legend AETERNITAS AVG N, which is found on coins not only with the Dioscuri and the wolf and twins but also with the Dioscuri only (Plate 40, 3), the wolf and twins alone (Plate 40, 4), and Fides holding two standards.<sup>35</sup> These reverses should therefore be interpreted as referring to Maxentius as the defender of Rome and its empire, symbolized by the Dioscuri, the wolf and twins, or both.<sup>36</sup> This explanation conforms



<sup>&</sup>lt;sup>32</sup> Sample taken from 25 coins of each series in the ANS collection, giving a total of 50 measurements (obverse and reverse).

<sup>33</sup> Jeločnik (above, n. 2), p. 144.

<sup>34</sup> Jeločnik (above, n. 2), p. 144.

<sup>&</sup>lt;sup>35</sup> RIC 6, p. 403, 11 15; p. 404, 35-38; p. 403, 20; p. 404, 39-42; p. 405, 43-44.

 $<sup>^{36}</sup>$  A. Arnaldi, "Il motivo della Aeternitas Augusti nella monetazione di Massenzio," NumAntClas 6 (1977), pp. 271-80. Note that the Dioscuri are found in the pediment of the temple represented on selected GONSERV VRB SVAE folles from Rome with the mint mark  $\frac{H}{RP-Q}$  (RIC 6, p. 377, 201-5) and  $\overline{RBP-Q}$  (RIC 6, p. 378, 208); these issues would predate the opening of the Ostian mint.

to the propaganda of Maxentian coinage as a whole, which emphasizes Rome and its symbols.<sup>37</sup> One might also point out that the expedition to Africa against Domitius Alexander was not designed as a large scale invasion in terms of men and material. Aurelius Victor states that Rufius Volusianus, the Praetorian Prefect and commander of the expedition, was supplied with *paucissimis cohortis*.<sup>38</sup> This suggests that the troops taken to Africa were relatively few and perhaps consisted primarily of the Praetorian Guard.

- J. Maurice links the formation of the Ostian mint with the revolt in Africa but stresses the need for coinage in order to purchase wheat from Egypt, since the supply from Africa was cut off.<sup>39</sup> However, the large-scale purchase of wheat from Egypt during the operation of the Ostian mint from 309 to 311 was highly unlikely, since Egypt was under the rule of Galerius, a man who had declared Maxentius an outlaw of the Tetrarchy at the Carnuntum conference of November 308. Only after Galerius's death in May 311 was an alliance concluded between Maxentius and Maximinus Daia, Galerius's successor in the east.<sup>40</sup> Maxentian coinage is also extremely scarce in the eastern dioceses.<sup>41</sup>
- M. Fulford stresses the economic factors behind the establishment of a Tetrarchic mint and sees Ostia as part of a continuous line of successive mints at port cities of the western Mediterranean (Carthage, Ostia, Arles) for the purpose of trade between Africa, Italy, Spain, and southern Gaul.<sup>42</sup> Yet, the Ostian mint was established at a time when Africa and Sardinia were in revolt and southern Gaul was under the rule of Constantine. All these territories would presumably have been closed to trade from Italy.



<sup>&</sup>lt;sup>37</sup> J. Gagé, "Le "Templum Urbis' et les origines de l'idée de Renovatio," *Mélanges Franz Cumont*, vol. 1 (Brussels, 1936), pp. 150-87, esp. 164-68; J. Polzer, "The Villa at the Piazza Armerina and the Numismatic Evidence," *AJA* 77 (1973), p. 148; Arnaldi (above, n. 36).

<sup>&</sup>lt;sup>38</sup> Aurelius Victor, *De caesaribus*, 40. 18, from *RE* 14, s.v. "Maxentius," col. 2448 (Groag).

<sup>39</sup> Maurice (above, n. 18), p. 43.

<sup>40</sup> E. Stein, Histoire du bas-empire, vol. 1 (Amsterdam, 1968), p. 90.

<sup>&</sup>lt;sup>41</sup> W. E. Metcalf, "The 'Cairo' Hoard of Tetrarchic Folles," *RBN* 120 (1974), chart on p. 104; C. King and A. Spaer, "A Hoard of Folles from Northern Sinai," *NC* 1977, p. 67, Table 2A, p. 68, Table 2C, p. 69, Table 2D, and p. 72.

<sup>&</sup>lt;sup>42</sup> M. Fulford, "Coin Circulation and Mint Activity in the Late Roman Empire: Some Economic Implications," *ArchJ* 135 (1972), pp. 67-114, esp. p. 69.

Finally, M. Hendy believes the Ostian mint reflects an administrative reorganization by which the diocese of Italia Suburbicaria was further divided into two dioceses.<sup>43</sup> The Rome mint consequently supplied the mainland, while Ostia disseminated coinage to Sicily, Sardinia, and Africa after its recapture.

Hendy's theory raises an important point which is also crucial to the arguments of Jeločnik, Maurice, and Fulford. They presuppose that the mint of Ostia was set up according to the function of a Tetrarchic mint, which is to supply a designated area and a large local bureaucratic and military establishment with coinage. In the case of Ostia, this should result in a majority of Ostian coins in the hoards of Sardinia and Africa following their recapture from Domitius Alexander in 310. A survey of the hoards from the period, however, does not bear this out.

# HOARDS OF MAXENTIAN COINS (Table 1)

Maxentian hoards prior to the noticeable dissemination of Ostian coins reveal the Tetrarchic nature of the Italian mints during the early reign of Maxentius, with a heavy concentration of coinage from the closest mint.<sup>44</sup> The hoard from Kellmünz in Bavaria (cl. spring-summer



<sup>&</sup>lt;sup>43</sup> M. Hendy, "Mint and Fiscal Administration under Diocletian, His Colleagues, and His Successors, A.D. 305-321," JRS 1972, pp. 75-82.

<sup>44</sup> The most useful source in the cataloguing of Maxentian hoards is J.-P. Callu, Inventaire des trésors de bronze constantiniens (313-346) (Wetteren, 1981). The bibliography for the hoards listed in Table 1 is presented in the Appendix. A number of hoards which include Maxentian coins are omitted from Table 1 for the following reasons. A. Total number of coins in the hoard is too small to provide reliable information; examples, Moncalieri (M. Cattaneo, Numismatica 13 [1947], pp. 83-86: 15 coins), Rome (NScavAnt [1888], p. 737: 14 coins). B. Unreliability of the published sample: El Jem (X. Loriot, BSFN 27, 2 [1972], pp. 160-62: 25 coins examined out of an original hoard of approximately 150). C. Unpublished or insufficiently published: Annico, Carthage II, Carthage III, Ghar El Melh, Pontoglio (listed in Callu with bibliography). D. Number of Maxentian coins in the hoard are too few to provide conclusive evidence of distribution: for example, Col du Chal (G. Gautier, Trésors Monétaires 1 [1979], pp. 77-92: 3 Maxentian coins out of 139 total), Montbouy (G. Fabre and M. Mainjonet, Gallia, suppl. 12 (1958), pp. 121-271: 10 Maxentian out of 3,310 total), and many others.

308) shows that the majority of coins crossing into the dioceses of Gallia and Viennensis from Italy come from the mint at Ticinum. Coins from Ticinum comprise 73.5% of the hoard; among the 64 Maxentian coins in this hoard, all are from Ticinum except two. The later hoard from Wettolsheim in Alsace (cl. 313) continues this high percentage of Ticinum coins among the Maxentian issues which filtered into Constantine's provinces. The hoards found at Centur on the Istrian Peninsula (cl. summer 310) are composed primarily of coins struck at the nearby mint of Aquileia. Čentur A, for example, is 64% Aquileian, Centur B is 69% Aquileian, while the Istrian hoard is 73%. The Italian hoard (cl. early 310) is comprised of coins predominantly from the Rome mint (99 out of 137 specimens), which suggests a findspot somewhere in the Suburbicaria. Finally, the mint at Carthage prior to its closure in 307 also served as the major supplier for Africa. A pre-Maxentian hoard found at Ngaous (cl. 305) is 46.8% Carthage and 21.3% Rome.45

When we look at the later Maxentian hoards, coins from the Ostian mint never dominate the circulation in a particular region. In fact, the quantity of coins from the Rome mint are in most cases equal to or greater than those from Ostia. A hoard in the National Museum of Malta (cl. late 310) shows a 3.1 ratio of Rome over Ostia. When we take into account the longer production of Rome and compare only the last two issues from Rome (RBP-Q and REP-Q) with both Ostian issues ( $\overline{MOSTA}$ - $\Delta$  and  $\overline{MOSTP}$ - $\Omega$ ), Rome still predominates. surprising that the hoards found in Africa, which date in many cases to the period of conflict between Maxentius's army and the forces of Domitius Alexander and which reflect the influx of coinage from Italy, maintain this pattern of circulation where coins from Rome outnumber those from the Ostian mint. The two hoards found near Mangub (cl. late 310 or 311) in Tripolitania, a province which did not side with Domitius Alexander, contain approximately equal numbers of the later issues from Rome and Ostia. Hoards from the territories once under the control of Domitius Alexander, such as Thina (cl. 310-11), Constantine II

<sup>&</sup>lt;sup>45</sup> J.-P. Callu and J. Yvon, "Le trésor de Ngous (Algérie)," *Mélanges d'archéologie* et d'histoire offerts à André Piganiol (Paris, 1966), pp. 303-20: 62 examples, 29 Carthage, 13 Rome.



TABLE 1

# Significant Hoards of Maxentian Folles

•Jodsp	oniA	ŗ		IS		Ι¥		IA		ΥI		IA		<b>V</b>		¥		¥		<b>⋖</b>		⋖		
ιιγαδς		0		4		31		7		0		0		4		$^{29+}$	17	1,009 +	2,002	6		12.7%		
nillia	02-10	73		7		3,137		1,407		510		2,150		105		+ 12]		+ 373]		14				
шnuį:		62		4		483		203		22		0		41		89]		[825		11				
Total		0		17		318		115		43		0		55		879		5,190		101		23.7%		
<i>Ostia</i> 309–12	MOSTP			15		260		101		41				29										
309	MOSTA			7		28		14		7				56										
Total	IΣ	0		94		614		219		82		0		142		1,202		8,663		185		51.5%		
310–12	REP-0			0		0		0		0				-				251						
Rome 308–10 310–12	RBP-Q RE			28		454		162		71				20				4,856						
307-8	프 I블 야			18		101		31		6				48										
307	R.P.O			15		51		22		4				21										
307	اچ م			က		<b>∞</b>		4		-				8					_					
Hoard Total	(% Max) $\overline{RP}$ -Q $\overline{R^*P}$ -Q	1,314	(4.9%)	137	(87.6%)	5,032	(91.1%)	2,042	(95.5%)	695	(100%)	2,150	(100%)	464	(74.8%)	2,208	(98.8%)	20,313	(85.5%+)	320	(ca. 90%)	140		
Hoards	Closure)	Kellmünz	(Summer 308)	Italian	(Early 310)	Čentur A	(Summer 310)	Čentur B	(Summer 310)	Istria	[Čentur B]	Čentur D	(Summer 310)	Malta	(End 310)	Mangub Ab	(311)	Mangub Be	(311)	I Thina	(311)	Constantine II4 140	(311)	

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6	15	15		7		21		85		75		20		
	14			3		20		81		53		20		
	-			7		-		4		11		0		
;	27 18 <sup>r</sup>	19		10		30		119		91+		221		
	9			5		11		32				11		
	<b>∞</b>			4		13		62				∞		
	1			0		7		7				1		
	1			-		4		6				1		
	0			0		0		-				0		
59	(60% + ) 1,828	(3.0%) 304	(16.7%)	1,138	(8.3%)	80	(67.5%)	3,797	(6.1%)	14,339	(2.5%)	6,427	(1.3%)	
d bezitigi			de Mercuze (312–13)	Wettolsheim	(313)	Sardinia	(316)	Delos 🛭	(316)	Dalheim	(317)	Saint-Colombier- 6,427	en-Sarzeu	(318)

V = ViennensisIS= Italia Suburbicaria IA= Italia Annonaria G = Gallia• Findspot (by diocese): A= Africa

b Mangub A, breakdown for Rome published as follows: folles of all types prior to reduction by Maxentius (6); reduced Maxentian folles of Temple Type (1,666) and other types (30); total (1,202). Ticinum, Aquileia, and Carthage are listed as reduced Maxentian folles + non-reduced.

<sup>c</sup> Mangub B, breakdown the same as Mangub A: (661), (7957) and (41); total (8663).

d Thina, Constantine II: totals are for entire hoard.

· Diyarbakir: collected in or near Rome mid 311 and transported to Syria, where finally closed end 311 or beginning 312.

' Domquer, Saint-Colombier: total for Rome included examples with illegible mint marks.

€ Delos: originally created in Italy ca. 316 and shipped east, where eventually closed 321. Total for Rome includes eight uncertain mint marks and one • Diyarba

• Diyarba

• Domque

mout leuising

1 Dalheim: totals for Rome, Ticinum, and Aquileia do not include the coinage of Maximian or Constantine. A minimum of 159 additional coins may ssigned to these three mints collectively. (cl. 311) and Sardinia (cl. 316), continue the domination of Rome over Ostia, despite the fact that these hoards represent the introduction of new coinage into these territories after the revolt was suppressed in the summer or fall of 310.46 In two hoards perhaps collected in Italy and transported to the east, Diyarbakir in Syria (cl. in the West mid-311) and Delos (cl. in the West 316), coins from the Rome mint are more numerous than those from the Ostia mint. Finally, the pattern found in Italy and Africa continues among the few Maxentian coins which filtered into Gallia and Viennensis, as illustrated by the hoards from Domquer (cl. 312), Saint Vincent de Mercuze (cl. 312-13), Dalheim (cl. 317), and Saint-Colombier (cl. 318).

It appears that the Ostia mint was not a regional mint whose coinage was disseminated to a particular area. The hoards show, in fact, that Ostian coins followed the same patterns of distribution as their counterparts from Rome. The selection of Ostia as a site for a new mint was not apparently to supply designated areas with coinage, including those provinces involved in the revolt of Domitius Alexander.

## REASONS FOR THE CREATION OF THE MINT AT OSTIA

The distribution patterns revealed by the hoards suggest that one of Ostia's functions was to supplement the production of folles at the Rome mint, which by 309 had successfully filled the gap in the African provinces created by the closure of the Carthage mint. In light of the apparent closing of the mints at Aquileia and Ticinum sometime in 310, a full two years before the invasion of Italy by Constantine, it would appear that a conscious policy had been devised by Maxentius whereby the minting of coinage would be limited to two central mints, one in Rome and the other nearby at Ostia.<sup>47</sup> Since the bronze coinage



<sup>&</sup>lt;sup>46</sup> See above, n. 30. The presence of Domitius Alexander in Sardinia is documented by a milestone found near Sulci inscribed with the usurper's name; see G. Sotgiu, "Un miliario sardo di L. Domitius Alexander e l'ampiezza della sua rivolta," *Archivio Storico Sardo* 29 (1964), pp. 149-58.

<sup>&</sup>lt;sup>47</sup> J.-P. Callu, La politique monétaire des empereurs romains de 238 à 311 (Paris, 1964), p. 461, n. 4. See also the comments in King (above, n. 2), pp. 70-71, and Sutherland, RIC 6, p. 342.

from both mints came to be distributed to all territories under Maxentius's control, this would explain the massive production of one major series at Rome, the CONSERV VRB SVAE reverse with Roma in her temple, and another at Ostia, the AETERNITAS-Dioscuri issues. This plan of centralizing mint production is in direct contrast to the policies of Maxentius's predecessors and the system of regional mints established by the reforms of Diocletian beginning in 294.

Ostia was chosen, however, as the site for a new mint with an additional reason in mind. The easiest and most economical way of increasing the production of folles would have been to add more officinae to the mint at Rome. There is certainly precedent for such a move: under Aurelian up to ten workshops operated at Rome, during the reign of Carus seven officinae, and as late as A.D. 297-98 nine workshops.48 A solution to the question concerning the foundation of the Ostian mint must lie in the fact that the first issues of this mint were in gold and silver only, since the opening of a mint to produce just gold and silver coinage is most unusual in the Tetrarchic period.49 Most important and as yet unrecognized, a strong case may be presented demonstrating that when Ostia began striking aurei and argentei, the mint at Rome discontinued these denominations and for the remainder of Maxentius's reign issued only folles.<sup>50</sup> Furthermore, the chief die engraver of the Rome mint was transferred to Ostia. Thus, the Ostia mint was established as the single center for the production of gold and silver coinage under Maxentius in 309. The reasons supporting this last claim are outlined below.

First, it was consistent practice during the Tetrarchic and Constantinian periods that when two mints were located within the same diocese, only one struck gold and silver. There are only special exceptions to this rule: the presence of the emperor and the *comes sacrarum largitio*-



<sup>&</sup>lt;sup>48</sup> P. H. Webb, RIC 5, 1, p. 256; 2 ,p. 127; RIC 6, p. 334.

<sup>&</sup>lt;sup>49</sup> See the chart in *RIC* 6, pp. 73-87; for another example, see P. Bastien, "The Iantum Mint," *ANSMN* 25 (1980), pp. 77-85.

<sup>&</sup>lt;sup>50</sup> Alföldi (above, n. 28), p. 31, maintains that the staff at Ostia comes originally from Rome but that the production of aurei continues at Rome well after the establishment of the Ostian mint. Sutherland, *RIC* 6, p. 344: "It is difficult to give a terminal date to the gold as a whole [at Rome]: the aurei are rare, and their typerange somewhat limited, and it is possible that they did not exist beyond 310."

num, in which case the issues are denoted by SM (Sacra Monela),<sup>51</sup> or single issues commemorating the vola. During the reign of Maxentius, Ticinum struck a limited issue of aurei with an SM designation in 307/8,<sup>52</sup> while no gold coinage was struck at Aquileia. Under Severus from 306 to 307, the duties of these mints had been reversed.<sup>53</sup> In the diocese of Gallia, Trier issued gold, silver and bronze denominations from 294 onward; Lugdunum issued only folles.<sup>54</sup> Since Ostia and Rome are located within the Suburbicaria, only one of these mints should have issued gold while the two were operating concurrently.

Secondly, the coins themselves bear out a date of 309, the year in which the Ostian mint began production, as a dividing line between the gold issues of Rome and those of Ostia. The gold and silver coinage of Rome falls exclusively into the period from fall 306 to spring 308. The last datable issue from Rome in either gold or silver is a series of multiples and aurei commemorating Maxentius's first consulship of 20 April 308. These show on the obverse a profile head of Maxentius with a lion's skin; the reverse bears the legend FELIX PROCESS CON-SVLAT AVG N framing a standing Maxentius dressed in a toga and holding a globe and scepter.55 Three examples of this type come from a hoard discovered in a shipwreck near Partinico, Sicily.<sup>56</sup> Among the 102 aurei and 17 multiples which make up this find, 62 are from Rome. 48 are Maxentian. The consular coins date the closing of the hoard to the middle of 308; there are no Ostian examples. The majority of gold coins produced at Ostia are datable to the years 310 to 312. Of the 11 known types, one is the previously mentioned multiple of Divus Romulus issued after his death in late 309, two are vota issues of late 310



<sup>&</sup>lt;sup>51</sup> Concerning the sacra largitiones, see C. King, "The Sacra Largitiones, Revenues, Expenditure and the Production of Coin," Imperial Revenue, Expenditure and Monetary Policy in the Fourth Century A.D. The Fifth Oxford Symposium on Coinage and Monetary History, BAR 76 (1980), pp. 141-73. For the SM designation on Tetrarchic coinage, see the discussion in RIC 6, pp. 90-92.

<sup>&</sup>lt;sup>52</sup> RIC 6, p. 294, 89-90.

<sup>&</sup>lt;sup>53</sup> RIC 6, p. 321, 74.

<sup>&</sup>lt;sup>54</sup> P. Brunn, *RIC* 8, p. 143.

<sup>&</sup>lt;sup>55</sup> RIC 6, p. 372, 167-69; and p. 374, 179.

<sup>&</sup>lt;sup>56</sup> R. A. G. Carson, "A Treasure of Aurei and Multiples from the Mediterranean," in *Mélanges de numismatique*, d'archéologie et d'histoire offerts à Jean Lafaurie (Paris, 1980), pp. 59-73.

or 311,57 one commemorates Maxentius's fourth consulship of 1 January 312,58 and three can be associated with the victory over Domitius Alexander in 310.59 Two remaining types have already been discussed as the earliest issues struck at Ostia, the TEMPORVM FELICITAS AVG N reverse and the CONSERVATOR VRBIS SVAE reverse (Plate 40, 5 and 6). This leaves only two types, which coincidentally serve as stylistic evidence for identifying their die engraver as the same artist who previously worked at Rome.

Two Maxentian aurei struck at Ostia from the Arras hoard show on the reverse Victory on the left presenting a globe to Maxentius seated on the right dressed in a cuirass with helmet and shield at his side (Plate 40, 7). The legend reads VICTORIA AET-ERNA AVG N. The obverse bears the familiar facing bust of the Ostian aurei with the legend MAXENTI-VS P F AVG. Another aureus struck at Ostia, now in Vienna, presents the same reverse type and legend, although from a different die than the previous coins from the Arras hoard (Plate 40, 8). On the obverse



<sup>&</sup>lt;sup>57</sup> RIC 6, p. 401, 8-9; J. Maurice, La numismatique constantinienne, vol. 1 (Paris, 1908), pl. 19, 8. For the celebration of Maxentius's quinquennalia in 310-11, see H. Mattingly, "The Imperial Vota," (pt. 2), ProcBritAc (1951), p. 251, n. 74.

<sup>58</sup> Not listed in RIC 6. Bank Leu 28, 5-6 May 1981, 562. This is the only documentation of Maxentius's fourth consulship of 1 January 312 outside of a single literary reference by the Chronographer of 354. The appearance of this coin negates the early date of October 311 for the Battle of the Milvian Bridge proposed by P. Bruun, "The Battle of the Milvian Bridge: The Date Reconsidered," Hermes 88 (1960), pp. 361-70.

on which a personification of Africa is prostrate before Maxentius. *RIC* 6, p. 400, 3: the reverse shows Mars standing on the left holding out a globe on which stands a Victory crowning Maxentius, standing on the right in military dress. The legend reads MARTI VICTORI COMITI AVG N. The same reverse type appears on an argenteus from the Ostian mint but with the legend MARTI PROPAGATORI AVG N. (*RIC* 6, p. 402, 12). The silver dates to 309 and must precede the defeat of Domitius Alexander, as the legend suggests. The aureus, with the change in legend, presupposes a date of 310 11 after the African victory. For the gold coins of Ostia reflecting the campaign in Africa, see A. Baldwin Brett, "The Aurei and Solidi of the Arras Hoard," *NC* 1933, p. 335, no. 139.

<sup>&</sup>lt;sup>60</sup> RIC 6, p. 401, 10; Baldwin Brett (above, n. 59), p. 335, 139; pl. 26, 7; P. Bastien and C. Metzger, Le trésor de Beaurains (dit d'Arras), Numismatique Romaine 10 (Wetteren, 1977), p. 85, 191-92, with illus.

<sup>61</sup> RIC 6, p. 401, 7.

the portrait is in profile, and the emperor is shown in military dress with cuirass and helmet; the legend reads MAXENTI-VS P(IVS) F(ELIX) INV(ICTVS) AVG. The same reverse appears also on an aureus minted at Rome, identical in composition to its Ostian counterparts except for a different break in the legend and the PR mint designation in the exergue (Plate 40, 9).62 A more striking comparison is seen when the obverse of this aureus is compared with that found on the previous Ostian coin. The portrait of the emperor on each coin can be compared detail for detail. On the bust there are these similarities: the flowing hem of the undergarment above the edge of the cuirass at the base of the neck; the tiny dots across the horizontal strap; and the diagonal lines of the left shoulder flap and the bow-like paludamentum on the right shoulder. The helmets are also decorated with identical designs, including a Victory driving a two-wheeled chariot. The contours of the crest are the same. The only visible difference is the straight border of the helmet above the ear on the Rome coin (Plate 40, 9) as opposed to the convex line on the Ostian piece (Plate 40, 8). However, one can see how the Ostian engraver originally designed a straight line for the helmet's border behind the ear and then changed it to a concave profile. This alteration conforms with the line of the helmet on the Rome aureus.

The similarities between the two aurei continue in the obverse legends. These are the only two coins from the mints at Rome and Ostia which add *Invictus* to the normal title of *Pius Felix Augustus*; the Rome example uses the abbreviation INVIC, the Ostian aureus the shorter INV.

There is no doubt that the same engraver was responsible for the dies of these two aurei. Furthermore, since these coins are not contemporary issues and are separated in time by three years, one may conclude that the chief die engraver for gold coinage at Rome from 306-8 worked also in the same capacity at Ostia from 309-12.

Following the chronology of Maxentian gold and silver coinage outlined by R. A. G. Carson, the aureus in question from the Rome mint belongs to a second issue of  $\overline{PR}$  gold which began in early 307.63 This



<sup>62</sup> RIC 6, p. 369, 152.

<sup>&</sup>lt;sup>63</sup> Carson (above, n. 56), pp. 60-61. Carson revises the chronology of Sutherland, RIC 6, pp. 339-40, and 343-44, by reversing the  $\overline{PR}$  and  $\frac{E}{PR}$  issues and placing an

issue includes the first examples on which Maxentius is identified as Augustus, a title he adopted in the spring of 307. The two previous issues of aurei from Rome, a first series of PR in 306 followed by  $\frac{E}{PR}$ , had identified Maxentius as *Princeps* or *Princeps Invictus*. The second series of  $\overline{PR}$  beginning in 307 continued at least until the spring of 308; the last datable coins of this issue announce Maxentius's first consulship of 1 April 308. At this time, a fourth issue with a new mint mark  $\overline{PR}$  would have supplanted, according to Carson, the previous  $\overline{PR}$  issue, thus providing a terminal date of 308 for this series. Yet, there is additional evidence which points to the placement of the aureus under discussion early in the second  $\overline{PR}$  issue. The obverse shows a youthful portrait of Maxentius where the emperor's beard is confined to the cheeks above the line of the jaw (Plate 40, 9). This youthful portrait is characteristic of the early gold issues of Maxentius as Princeps belonging to the first PR and  $\frac{E}{PR}$  issues. Later coins from the Rome mint,

including selected examples of the second  $\overline{PR}$  issue as well as those with a  $\overline{P*R}$  mint designation, represent Maxentius with the beard extending across the neck to the Adam's apple.<sup>68</sup> The profile portraits of Maxentius on Ostian gold and silver continue this later form of the beard (Plate 40, 10). In addition, with the exception of the Ostian aureus in Vienna, the designation of Maxentius as *Augustus Invictus* appears on the

initial  $\overline{PR}$  series in 306, followed by  $\frac{E}{PR}$  also in 306, and then a second issue of  $\overline{PR}$  beginning in 307. See also J. P. C. Kent, "The Pattern of Bronze Coinage under Constantine I," NC 1957, p. 20. Carson's second  $\overline{PR}$  issue includes RIC 6, p. 368, 142; p. 369, 152; pp. 372-75, 167 and 170 86.



<sup>64</sup> First  $\overline{PR}$  issue: Carson (above, n. 56), pp. 67-68, 68-83, and pl. 6; RIC 6, p. 369, 143-51.  $\frac{E}{PR}$  issue: Carson, pp. 68-69, 84-91, pl. 6; RIC 6, pp. 367-68, 134-41.

<sup>65</sup> RIC 6, p. 372, 167; p. 374, 179.

<sup>&</sup>lt;sup>66</sup> Carson (above, n. 56), p. 71, 11-15, where he lists the  $\overline{P^*R}$  issue "308-(312)." Sutherland, RIC 6, p. 343, places this issue in the early autumn of 307, despite recognizing the reference to the consulship.

<sup>67</sup> RIC 6, pl. 6, 143; J. P. C. Kent, Roman Coins (London, 1978), pl. 156, 612.

<sup>68</sup> Carson (above, n. 56), pl. 6, 96; pl. 7, 101, 103, 106, 110, 111 and 115.

coinage only in this one instance at Rome and on a brief series of unreduced folles minted at Aquileia in the late spring or early summer of 307 following Maxentius's victory over Severus. Invictus as a title is used extensively on the coinage from October 306 to early 307 where Maxentius is designated as Princeps. One might expect the appearance of Augustus Invictus on an aureus from Rome at the same time as its use at Aquileia and in both instances to be a holdover from the previous Princeps coinage. Thus, as Sutherland has proposed, the aureus from Rome should date to the summer of 307, while its reverse type reflects the successive defeats of Severus and Galerius in North Italy.

The Ostian aureus in Vienna (Plate 40, 8) is an anomaly among the aurei of this mint. It is the only Ostian coin with the title *Invictus*. The youthful portrait is unique, and the use of the profile on an aureus is less common at Ostia than the frontal portrait (Plate 40, 6).<sup>72</sup> Due to the similarities with the aureus from Rome, the Ostian coin can only be regarded as a revival of a type originally created by the same die engraver in Rome. The aureus must date no earlier than 309, the opening of the Ostian mint, and was perhaps issued in association with another military victory of Maxentius, the defeat of Domitius Alexander in 310. The use of the same reverse type with a frontal portrait on the obverse, illustrated by the two coins from the Arras hoard (Plate 40, 7), would suggest a contemporary issue.<sup>73</sup>

#### CONCLUSIONS

The evidence shows that the mint at Ostia was initiated first and foremost for the production of coinage in precious metals. As part of this operation, personnel from the mint at Rome were transferred



<sup>69</sup> RIC 6, p. 324, 101-4 and 106.

<sup>&</sup>lt;sup>70</sup> It is interesting to note, however, that while on the coins the title of *Invictus* is quite rare, it is the standard form on inscriptions; for a list of Maxentian inscriptions, see Arnaldi (above, n. 36), p. 280, 57-58.

<sup>&</sup>lt;sup>71</sup> RIC 6, p. 340. Alföldi (above, n. 28), p. 202, 541, dates this coin to 311–12, presumably on the basis of the similarities with the Ostian aureus.

<sup>&</sup>lt;sup>72</sup> Of the ten known types of aurei from Ostia, six bear a frontal portrait (*RIC* 6, p. 400, 3; p. 401, 4, 5, 9, and 10; and the aureus commemorating Maxentius's fourth consulship; see above, n. 58).

<sup>&</sup>lt;sup>73</sup> Bastien and Metzger (above, n. 60), p. 85, date this type to 310-11 and associate it with the *quinquennalia*.

to Ostia, including the chief die engraver and designer. The choice of Ostia for the site of the new mint was deliberate. Ostia was sufficiently close to Rome to supply gold coinage to the capital and yet far enough away to remain immune from the political insecurities of Rome.

One has only to look at the events of 308 and 309 to see how precarious Maxentius's hold on Rome may have been. The revolt in Africa in the late spring or summer of 308 terminated Rome's major source of grain. Grain shortages were soon to follow, and the ancient sources report a famine in 309 and a subsequent riot put down by the Praetorian Guard at a cost of thousands of lives.<sup>74</sup> In April of 308 Maximian had attempted a coup, unsuccessful primarily due to the loyalty of the Praetorians to Maxentius.<sup>75</sup> It was very likely that a force of Praetorians would be leaving for Africa in the expedition against Domitius Alexander, since Maxentius could little afford to withdraw troops protecting the northern frontier against Constantine and Galerius.<sup>76</sup> This would have been shortly after the conference at Carnuntum in November 308, when the reigning Tetrarchs had proclaimed Maxentius an outlaw. Relations between Maxentius and the people of Rome do not seem to have improved by 312. Despite the security provided by the Aurelian Wall, Maxentius chose not to stay in the city and withstand a possible seige with a less than supportive populace; instead, he decided to confront Constantine outside the city which resulted in a disastrous defeat at the Milvian Bridge.77

In 309 the security of the imperial treasury may have been foremost in the mind of Maxentius. We learn that in 309 Maximian tried another unsuccessful coup, this time against Constantine in Arles. Lactantius records that Maximian's first objective was the imperial treasury: "repente purpuram sumit, thesauros invadit, donat ut solet large." For Maxentius, Ostia would have provided a safer location for a mint than Rome. The city was fortified, easy to defend, and accessible to the sea if evacuation was necessary; yet, most importantly, Ostia was removed from the unsteady political climate of the capital.



<sup>&</sup>lt;sup>74</sup> Aurelius Victor, *De caesaribus*, 40.17; Zosimus, *Historia nova*, 2.12; also E. Stein (above, n. 40), p. 85.

<sup>75</sup> Lactantius, De mortibus persecutorum 28.3.

<sup>&</sup>lt;sup>76</sup> Groag (above, n. 38), col. 2448.

<sup>&</sup>lt;sup>77</sup> Stein (above, n. 40), p. 91.

<sup>&</sup>lt;sup>78</sup> Lactantius, De mortibus persecutorum 29.5.

Ultimately when Constantine took control of the Ostian mint following the defeat of Maxentius in 312, the new emperor found the operation to be unnecessary. As early as March of 313, preparations were begun to transfer the mint at Ostia to Arles. Yet, while the entire work force at the Ostian mint was being moved to Arles, the chief die engraver was sent to Ticinum, whose mint was soon to supplant Trier as the major supplier of gold coinage in the West under Constantine. Andreas Alföldi has identified the master of the Ostian facing portraits as the same artist responsible for the facing busts of Constantine at Ticinum. It is now possible to associate the pre-Ostian career of this die engraver with the mint at Rome.

#### APPENDIX

#### MAXENTIAN HOARDS: A BIBLIOGRAPHY

Kellmünz: FMRD, vol. 1, 7, no. 7157.

Italian: R. A. G. Carson and J. P. C. Kent, "Constantinian Hoards and Other Studies in the Later Roman Bronze Coinage," NC 1956, pp. 83-161.

Centur: A. Jeločnik, The Centur Hoard: Folles of Maxentius and the Tetrarchy, Situla 12 (Ljubljana, 1973).

Istria: V. Picozzi, "Un ripostiglio di 'folles' di Massenzio," Numismatica 5 (1964), pp. 181 98.

Malta: P. Ker Gray, "A Hoard of 'Folles' in the National Museum of Malta," NC 1961, pp. 202-9. The presence of a single REP-Q folles from Rome suggests that Gray's date of 311 is too late and that the end of 310 seems more probable.

Mangub: P. Salma, "Les trésors maxentiens de Tripolitania: rapport préliminaire," *LibyaAnt* 3-4 (1966-67), pp. 21-27. A date of summer 310 is too early for the closing of this hoard; 311 is accepted following Jeločnik (above, Čentur), p. 138.

Thina: N. Fendri, "Thermes des mois à Thina. Inventaire du trésor monétaire," CahTunisie 12 (1964), pp. 59-67.



<sup>&</sup>lt;sup>79</sup> P. Bruun, The Constantinian Coinage of Arelate (Helsinki, 1953), pp. 3-4.

<sup>&</sup>lt;sup>80</sup> A. Alföldi, "The Initials of Christ on the Helmet of Constantine," *Studies in Honor of Allan Chester Johnson* (Princeton, 1951), pp. 303-11; and "The Helmet of Constantine with the Christian Monogram," *JRS* 1932, pp. 9-23.

- Constantine II: P. Salma, "Sur un lot monétaire constantinien découvert au Guella (Algérie)," AIIN 7-8 (1960-61), p. 264, n. 30.
- Diyarbakir: P. Bastien, "Trouvaille de Diarbekir," RN 1967, p. 173.
- Domquer: P. Bastien and F. Vasselle, Le trésor monétaire de Domquer (Somme), Numismatique Romaine 2 (Wetteren, 1965).
- Saint Vincent de Mercuze: N. Papet, "Trouvaille de monnaies romaines à Saint Vincent de Mercuze," Bulletin de la Société Dauphinoise d'Ethnologie et d'Archéologie (1961), pp. 50-61.
- Wettolsheim: F. A. Schaeffer, "Deux trésors de monnaies romaines découverts en Alsace," Bulletin de la Société pour la Conservation des Monuments historiques d'Alsace (1926), pp. 93-128.
- Sardinia: A. Burnett, "A Hoard from Sardinia," CH 5 (1979), pp. 67–68. Delos: J. Svoronos,  $\Theta \eta \sigma a v o o c P \omega \mu a \tilde{\iota} \kappa \tilde{\omega}$  νομίσμάτων  $\tilde{\epsilon} \kappa$  τῶν  $\tilde{\epsilon} \nu \tilde{\epsilon} \kappa \tilde{\epsilon}$  ε 1904 ἀνασκαφῶν τῆς Δήλου, JIAN 12 (1910), pp. 153–93.
- Dalheim: Fundmünzen der römischen Zeit in Grossherzogtum Luxemburg, vol. 1 (1972), pp. 104-24; vol. 2 (1977), pp. 33-34.
- Saint-Colombier-en-Sarzeau: H. Huvelin, "Le trésor de Saint-Colombieren Sarzeau," *Trésors Monétaires* 2 (1980), pp. 59-71.

### **KEY TO PLATE 40**

- 1. Rome, follis. ANS (*RIC* 6, p. 376, 194b).
- 2. Ostia, follis. ANS (*RIC* 6, p. 403, 16).
- 3. Ostia, follis. ANS (RIC 6, p. 404, 35).
- 4. Ostia, follis. ANS (RIC 6, p. 404, 41).
- 5. Ostia, aureus. Vienna (*RIC* 6, p. 400, 2).
- 6. Ostia, aureus. BM (*RIC* 6, p. 401, 5).
- 7. Ostia, aureus. Private coll. (RIC 6, p. 401, 10) Photograph reproduced from P. Bastien and C. Metzger, Le trésor de Beaurains (Wetteren, 1977), p. 85, no. 191.
- 8. Ostia, aureus. Vienna (*RIC* 6, p. 401, 7).
- 9. Rome, aureus. BM (*RIC* 6, p. 369, 152).
- 10. Ostia, argenteus. BM (*RIC* 6, p. 402, 12).



(Plates 41–44)

PIERRE BASTIEN

For reasons of gain or from the mere desire to deceive, the imitation of coins is a practice as old as coinage itself. On the numismatic level the examination of an imitation possesses in itself only the interest of distinguishing it from its prototypes. But on the level of the circulation of the coinage, the massive production of imitations changes the dimensions of the problem. It then becomes an economic phenomenon, usually connected with a shortage of coins. G. C. Boon, borrowing terms from the medical vocabulary, has distinguished *endemic* counterfeiting, that is, the constant imitation in small quantities of the regular coinage, from *epidemic* counterfeiting, which puts a large number of copies into circulation.<sup>1</sup> *Endemic* and *epidemic* provide good images and in view of their evocative character deserve to be generally used.

In the Roman imperial era the *epidemic* production of bronze imitations was limited to certain periods and certain geographical areas. The circumstances which caused it vary from age to age. In Gaul the copious counterfeiting of the *as* from Augustus to Nero sprang from a local shortage of small bronze coins, at a time when the monetary system as a whole was firmly established.<sup>2</sup> In northern and central Gaul and

<sup>&</sup>lt;sup>1</sup> G. C. Boon, "Counterfeit Coins in Roman Britain," Coins and the Archaeologist, BAR 4 (Oxford, 1974), p. 95.

<sup>&</sup>lt;sup>2</sup> C. M. Kraay, *Die Münzfunde von Vindonissa* (bis Trajan), (Basel, 1962), pls. 1-10; J.-B. Giard, "Le pélérinage gallo-romain de Condé-sur-Aisne et ses monnaies," *RN* 1968, pp. 84-91, pls. 9-18.

in Britain the issue of forged radiates was a result of the collapse of the antoninianus and of the inadequacy of the official coinage after the fall of Tetricus. J. Lallemand and M. Thirion have demonstrated clearly that the activity of the local Gallic mints extended mainly from 273 to 283,3 even though in 274 Aurelian decreed that the poor quality antoniniani should be withdrawn, and even though the Lyon mint was issuing, in fairly large quantities, it would seem, the aurelianiani of the Aurelian reform.

In the fourth century the phenomenon resulted from different circumstances. We propose to study here the counterfeit coinage of silvered bronze and bronze from 318 to 363,4 confining ourselves to imitations that were struck. Cast imitations, based on official coins or on other copies, must not be neglected. They form an appreciable proportion of the counterfeit coinage, but, being fairly simple to produce, are probably the work of private individuals. Struck copies, on the other hand, are more plentiful and come from well organized workshops, the only ones capable of putting into circulation substantial quantities of coinage. However, it should be noted that in some inventories cast and struck imitations are not always separated, doubtless because it is not always easy to distinguish between them. This is a source of error which can alter certain statistics.

From 318 to 363 there were several *epidemic* outbreaks of imitations. The first follows the monetary reform of Constantine in 318 and reproduces the prototypes issued from 318 to 330: *Victoriae laelae* (Plate 41, 1), *Virtus exercit* (Plate 41, 2-3), *Beata tranquillitas* (Plate 41, 4), *Vola* (Plate 41, 5-6), *Sarmatia* (Plate 41, 7) and *Providentiae* (Plate 41, 8).

A second wave of imitations began in the last few years of Constantine's reign and went on up to a date which is difficult to determine precisely, between 342 and 348. It copies the types *Gloria exercitus* with both two standards (Plate 41, 9-11) and one (Plate 41, 12-15),



<sup>&</sup>lt;sup>3</sup> J. Lallemand and M. Thirion, Le trésor de Saint-Mard I, Étude sur le Monnayage de Victorin et des Tétricus, Numismatique Romaine 6 (Wetteren, 1970), pp. 55-59.

<sup>&</sup>lt;sup>4</sup> The considerable bibliography dealing with this period naturally cannot be used in its entirety. We have had to make a choice of references. This explains why certain works, sometimes important ones, are not cited.

Urbs Roma (Plate 42, 16-19), Constantinopolis (Plate 42, 20-24), Pax publica and Pietas romana, in modules which decrease in size and end up in minimissimi of 0.30 g and 7 mm and even less. The striking of imitations of the type Victoriae Dd Auggq Nn issued by the official mints from 342 to 348 seems to have been on a smaller scale and it is probable that it coincided for some time with that of copies of the preceding series (Plate 42, 25-26).

The third substantial issue of imitations followed the reform of 348 which created the maiorina. The new types *Fel temp reparatio* depicting galley (Plate 42, 27–28), hut (Plate 42, 29–30), fallen horseman (Plate 43, 31–32) and two captives, were to be copied with a module often close to the normal one.

Magnentius's usurpation in 350 provoked in Gaul and Britain a fourth eruption of imitations with the reverses Felicitas Reipublice (Plate 43, 33-34), Gloria romanorum (Plate 43, 35-36) and Victoriae Dd Nn Aug et Caes (or Cae) (Plate 43, 37-42). The coins of Magnentius's reform bearing the inscription Salus Dd Nn Aug et Caes were imitated less often (Plate 43, 43-44).

After the usurper's fall, when the maiorinae were suppressed in 354 in favor of the half maiorinae, a fifth flare-up of imitations occurred. Copies with the inscription *Fel temp reparatio* and depicting the fallen horseman were put into circulation in considerable numbers and constantly declining modules, down to tiny minimi (Plates 43-44, 45-49).

The appearance of the small bronze coins *Spes Reipublice* in 358 produced hardly any imitations, but Julian's introduction of new bronze coins with the inscriptions *Vot X Mult XX* and *Securitas Reipub* produced a rather more substantial counterfeit coinage, which seems to have been only *endemic* in character (Plate 44, 50-51).

Before studying the problems raised by these different series of imitations it will be useful to have a look at the mints which produced them. Unfortunately our knowledge of these workshops is very imperfect. We have no idea of their precise sites, but it is reasonable to suppose that they were situated in the center of the areas in which their products circulated. A study of dies based on the material found in hoards and of the coins from various sites would make a better geographical approach possible, but such an investigation, which would be long and difficult, has thus far not been attempted. However, it



can be accepted for the moment that imitations of the period 318-363 were produced in local workshops in Britain, and Gaul, mainly in areas north of the Seine, in the Rhineland, Illyria, the Iberian peninsula and Egypt.

### **ALLOYS**

What metal was used in these local workshops? It is very unlikely that the forgers produced their own alloys. They must have melted down either the bronze in everyday objects or ingots, or coins withdrawn from circulation. The second hypothesis is confirmed in a number of different circumstances. J. N. Barrandon and C. Brenot have analyzed 12 imitations of the Victoriae laetae coins by neutron activation revealing silver content varying from 0.10 to 2.5%, with an average of 1.53%. In four imitations of the Vota type the percentage lies between 1.63 and 1.95, with an average of 1.79%.5 These copies, put into circulation shortly after the reform of 318 were doubtless made from the discredited folles. After the reform of 348 the proportion of silver in certain imitations of the majorinae inscribed Fel temp reparatio is by no means negligible. A. Ravetz finds 0.7% of silver in a counterfeit maiorina of the galley types and L. H. Cope and H. N. Billingham find 0.36, 0.43 and 0.42% in similar specimens.7 It is the same with two Magnentian copies of the Victoriae type which have recently been subjected to a complete chemical analysis. They contain 0.54 and 0.59% respectively of the precious metal.8 And imitations of the Fel temp reparatio coins with the fallen horseman later



<sup>&</sup>lt;sup>5</sup> J. N. Barrandon and C. Brenot, "Analyses de monnaies de bronze (318-340) par activation neutronique à l'aide d'une source isotopique de Californium 252," Les "dévaluations" à Rome, époque républicaine et impériale (Rome, 1978), p. 135, 226-41.

<sup>&</sup>lt;sup>6</sup> A. Ravetz, "Neutron Activation Analysis of Silver in Some Late Roman Copper Coins," Archaeometry 6 (1963), p. 50, 117.

<sup>&</sup>lt;sup>7</sup> L. H. Cope and H. N. Billingham, "The Compositions of 35 Roman Bronze Coins of the Period A.D. 284-363," BullHistMetalGroup (1967), p. 5, 19-21.

<sup>&</sup>lt;sup>8</sup> P. Bastien, Le Monnayage de l'atelier de Lyon, 337-363, Annexe (in preparation), Imitations I 92 and I 102.

than 354 can show an appreciable proportion of silver: 1.2, 0.8, 0.9 and 0.9% according to A. Ravetz.9

However, in all series we find specimens with a very small proportion of silver or none at all. Such is the case with the imitations issued at the end of Constantine's reign or after it: Gloria exercitus have 0.2 and 0.3%, Urbs Roma, 0.4, 0.2 and 0.2%, and Constantinopolis, 0.2%, according to A. Ravetz.<sup>10</sup> In another series of analyses C. E. King puts the percentages of silver in imitations from the period 335–41 between 0.0 and 0.4.<sup>11</sup> And after the reform of 348 some imitations contain no silver at all. Such is the case with a maiorina of the fallen horseman type analyzed by L. H. Cope and H. N. Billingham,<sup>12</sup> with another, later than 354, examined by A. Ravetz,<sup>13</sup> and with three maiorinae of the two Victories type of Magnentius.<sup>14</sup> In the latter cases there was no melting down of official coins; doubtless nonmonetary bronze was used.

The other components of the alloys used in imitations are less well known. So far as tin is concerned, C. E. King notes that 41.4% of the types from 330–41 contain only 0.0 to 0.4% of this metal, 20.7% between 0.5 and 0.9% and 19.5% between 1.0 and 1.4%. During the same period the percentage of lead varies between 9 and 13 in 40% of the specimens. This large proportion of lead tends to increase in counterfeits of the Fel temp reparatio type of 348. L. H. Cope and H. N. Billingham in fact report percentages of 22.98, 16.91 and 23.55 in the analysis of the specimens previously cited. And the five specimens of Magnentius mentioned above contain 22.71, 21.49, 28.10, 17.00 and 15.40% respectively of lead. This increase in the percentage of lead is also to be observed in the alloys of official coins and thus has no particular signi-



<sup>&</sup>lt;sup>9</sup> Ravetz (above, n. 6), p. 50, 118-20 and 122.

<sup>10</sup> Ravetz (above, n. 6), p. 50, 111-16.

<sup>&</sup>lt;sup>11</sup> C. E. King, "The Alloy Content of Folles and Imitations from the Woodeaton Hoard," *Pact* 1 (1977), pp. 96-97.

<sup>12</sup> Cope and Billingham (above, n. 7), p. 5, 26.

<sup>13</sup> Ravetz (above, n. 6), p. 50, 121.

<sup>&</sup>lt;sup>14</sup> P. Bastien, Le Monnayage de Magnence (350-353), 2nd ed. (Wetteren, 1983), p. 111.

<sup>15</sup> King (above, n. 11), p. 100.

<sup>16</sup> Cope and Billingham (above, n. 7), p. 5, 19-21.

<sup>17</sup> Bastien (above, n. 8), I 92 and I 102, and (above, n. 14), p. 111.

ficance so far as imitations are concerned, but it poses a metallurgical problem which demands study.

We have no analyses at our disposal for imitations of the bronze coins with the inscription *Spes Reipublice* or the silvered bronze coins with the inscription *Securitas Reipub*. To sum up, the file on alloys used in copies issued from the reform of 318 to the death of Julian turns out to be fairly thin and numerous analyses would be needed to complete it.

## **METROLOGY**

The metrology of imitations of the period 318-63 encounters various difficulties. First, there is the lack of documentation, since most of the publications of hoards and of coins from particular sites do not mention the weights of the specimens cited. Then, to judge by the details known to us, it looks very much as if the weights of copies of the same period and of the same module can vary from one region to another. And when the module decreases, as it does in the second *epidemic* series after 330 and the fifth after 354, the averages would be only of interest if they were determined according to the diameter of the specimens. It is, however, possible that in the case of the minimi in particular, coins with different modules were issued together. In any case, the minimi and the minimissimi pose a problem that is difficult to solve. Did they represent divisions of heavier imitations? What was their exchange value? These questions remain unanswered for the moment.

Imitations of the coinage of 318 to 330 almost always show a module quite close to that of the original. The study of weights remains to be carried out for the local Gallic workshops. Publications rarely provide details and a census of specimens in public collections would be extremely useful. We shall take account here of two groups of imitations: the 21 specimens of the Chavannes hoard, <sup>19</sup> the average weight of which



<sup>&</sup>lt;sup>18</sup> For analyses of official coins, see Bastien (above, n. 14), p. 77: 16.4, 16.4, 20.4, 8.0, 10.3, 11.1 and 9.8% for coins of the four Gallic mints, and Cope and Billingham (above, n. 7), pp. 5-6; 24, Constantius II: 17.41%; 29, Gallus: 13.08%; 31, Constantius II: 12.78%, type *Spes Reipublice*; 32, Julian: 21.82%; 33, Constantius II: 24.54%; 34, Julian: 34.36%.

<sup>19</sup> L. Chaurand, "Le trésor de Chavannes," in Mélanges de travaux offerts à Mé Jean Tricou (Lyon, 1972), pp. 73-101 (revised figure).

is 2.46 g, and the 70 specimens bearing the Lyon mark which we have recently collected, the average weight of which is also 2.46 g.<sup>20</sup>

The documentation is much more ample for the Danubian region. A. Alfoldi studied 232 specimens (revised figure) of these copies, most of which bear the Siscia mark.<sup>21</sup> From the weight of 180 of them an average of 2.63 g has been deduced. If we add the imitations described by K. Biró-Sey,<sup>22</sup> C. Brenot<sup>23</sup> and M. R. Vasic,<sup>24</sup> we reach a total of 252 specimens, with an average weight of 2.64 g. In comparison, the average weights of the official nummi of the period 318–30 vary between 2.99 and 3.24 g for the mints at London, Trier, Lyon and Arles<sup>25</sup> and, for Lyon, on the basis of 1,435 specimens, from 2.99 to 3.15 g according to the issue.<sup>26</sup> The averages are slightly higher in the Balkan mints: 3.06 to 3.24 g for issues from Siscia, 3.11 to 3.19 g for those of Sirmium, on the basis of 6,659 specimens.<sup>27</sup>

The imitations put into circulation from 330 onward are, as is well known, extremely numerous and of very varied modules. J.-P. Callu and J.-P. Garnier have established the corpus.<sup>28</sup> This was a substantial bibliographical task and one that is very valuable for the study of the circulation of the local coinage, but it reveals the lack of interest in metrology in most publications. We shall therefore confine ourselves to mentioning a few averages based on our personal documentation and some inventories of sites where weighing the coins was not excluded.



<sup>&</sup>lt;sup>20</sup> P. Bastien, Le Monnayage de l'atelier de Lyon, 318-337, Numismatique Romaine 13 (Wetteren, 1982), p. 114.

<sup>&</sup>lt;sup>21</sup> A. Alföldi, "Materialen zur Klassifizierung der gleichzeitigen Nachahmungen von römischen Münzen aus Ungarn und den Nachbärlandern," Numizmatikai Közlöny (1926), pp. 37-43, pls. 1-6.

<sup>&</sup>lt;sup>22</sup> K. Biró-Sey, "Contemporary Roman Counterfeit Coins in the Niklovits Collection," Folia Arch 28 (1977), p. 100, 15-23.

<sup>&</sup>lt;sup>23</sup> C. Brenot, "Le trésor de Bikiè-Do (environs de Šid, Voïvodine)," *Sirmium* 8 (Rome-Belgrade, 1978), pp. 97-98 (28 specimens).

<sup>&</sup>lt;sup>24</sup> M. R. Vasic, "A IVth and Vth Centuries Hoard of Roman Coins and Imitations in the Collection of the National Museum in Belgrade," *Sirmium* 8 (Rome-Belgrade, 1978), pp. 119-26 (35 specimens, cast imitations not being taken into account).

<sup>25</sup> Bastien (above, n. 20), pp. 66-67.

<sup>26</sup> Bastien (above, n. 20), p. 75.

<sup>27</sup> Brenot (above, n. 23), pp. 23-24.

<sup>&</sup>lt;sup>28</sup> J.-P. Callu and J.-P. Garnier, "Minimi constantiniens trouvés à Reims, Appendice II: Corpus des imitations," NumAntClas 6 (1977), pp. 300-315.

We examined 28 imitations of the types Gloria exercitus, Urbs Roma and Constantinopolis, ranging from 13 to 17 mm in diameter and weighing between 1.06 and 2.49 g (average 1.50); and 13 imitations of the same reverses, ranging from 9 to 12 mm in diameter and from 0.66 to 1.53 g in weight (average 0.92).29 J. Lallemand, in her study of the coins found in the Sambre at Namur, enumerates 5 imitations of 13 to 17 mm weighing between 0.97 and 2.06 g, with an average of 1.36 g and 16 imitations of 7.8 to 12.9 mm from 0.25 to 1.38 g with an average of 0.75 g.30 At Brunehaut-Liberchies, where the diameters are not specified, 11 copies weigh between 1.14 and 1.74 g, with an average of 1.36 g, and 31 weigh from 0.28 to 0.99 g, with an average of 0.64 g.31 At Dourbes the imitations which bear Lyon marks and the weights of which are known divide as follows: Gloria exercitus (two standards), 5 specimens of 0.73 to 1.36 g, average 1.07 g; Gloria exercitus (one standard), 14 specimens of 0.39 to 1.01 g, average 0.65 g; Constantinopolis, 22 specimens of 0.27 to 1.27 g, average 0.77 g; Urbs Roma, 20 specimens of 0.33 to 1.18 g, average 0.82 g; hybrids, 9 specimens of 0.39 to 0.82 g, average 0.63 g.32

The material from three French sites listed by J.-P. Callu and J.-P. Garnier brings other figures for different geographical areas.<sup>33</sup> At Saclas (Essone) 42 specimens weigh on average 0.60 g; at Entrains (Nièvre) 39 specimens weigh on average 0.77 g. Les Bolards (Côte d'Or) discloses 26 specimens weighing on average 0.74 g. Apart from two minimi of 8 mm, the diameters vary from 10 to 14 mm, with an average of 11.5 mm. The 24 specimens from Camp Ferrus (Tarn) have been described by G. Depeyrot.<sup>34</sup> Their average weight is 0.60 g, with diameters varying from 7 to 17 mm. At Segontium, G. C. Boon has listed 20 imitations of the type Gloria exercitus with two standards, weighing from 0.48 to 2.01 g, 22 Urbs Roma of 0.39 g to 1.29 g, 27 Constantinopolis



<sup>29</sup> Bastien (above, n. 8), 33 of these imitations are illustrated, I 1-I 33.

<sup>&</sup>lt;sup>30</sup> J. Lallemand, "Monnaies antiques trouvées dans la Sambre (Namur, abords du pont de Sambre)," RBN 1956, pp. 78-79.

<sup>&</sup>lt;sup>31</sup> J. Lallemand, "Les monnaies du castellum du Bas-Empire de Brunehaut-Liberchies," *RBN* 1971, pp. 53-63.

<sup>32</sup> Dourbes, Roche à Lomme (prov. de Namur). Unpublished documentation of J. Lallemand.

<sup>33</sup> Callu and Garnier (above, n. 28), pp. 306-7.

<sup>&</sup>lt;sup>34</sup> G. Depeyrot, "Inventaire des monnaies de Camp Ferrus (commune de Loubers, Tarn, France)," Bull. Féd. Tarnaise de Spéléoarchéologie (1978), p. 15, 406-29.

between 0.40 and 2.15 g, 1 *Pietas Romana* of 0.30 g, 1 *Pax publica* of 0.67 g and 20 *Gloria exercitus* with one standard weighing from 0.32 to 1.22 g. The diameters are not specified. Of 87 specimens weighed, the average is 0.91 g.<sup>35</sup>

Finally, the little hoard of Rheims provides us with a particularly useful publication, in which all the coins are illustrated and well described, with their weights and diameters.<sup>36</sup> In spite of the differences in the modules, this collection gives us the impression of homogeneity. The diameters of 38 specimens vary from 7.5 to 12 mm and the weights from 0.26 to 1.12 g with an average of 0.61 g. It will be noted that the averages of the batches previously cited vary, but the majority of them lie between 0.61 and 0.75 g.

Imitations of the type Victoriae Dd Auggq Nn are much less numerous than the preceding ones. They must have appeared after 342 and were probably struck at the same time as the imitations of the Gloria exercitus, Urbs Roma, etc. types for some time. But by themselves they should not be classed as part of the epidemic phenomenon. The relative rarity of the Victoriae becomes apparent when we compare their number with that of the Gloria exercitus, Urbs Roma and Constantinopolis in the batches examined above: Lyon (4 specimens, 0.80, 1.22, 1.06, 2.02 g), Namur (3 specimens, 1.74, 1.34, 0.63 g), Brunchaut-Liberchies (6 specimens, 0.92, 0.60, 0.86, 0.53, 0.50, 0.83 g), Saclas (5 specimens), Les Bolards (5 specimens, 0.83 g on average), Entrains (5 specimens, 0.64 g on average). Thus from the metrological point of view those imitations are very close to the preceding ones.

The creation of the maiorina with the reverse *Fel temp reparatio* in 348 unleashed a third substantial series of imitations, though smaller in volume than the second. The Heslington<sup>41</sup> and Oldcroft<sup>42</sup> hoards

<sup>&</sup>lt;sup>42</sup> J. F. Rhodes, "The Oldcroft (1971-2) Hoard of Bronze Coins and Silver Objects," NC 1974, p. 73.



<sup>&</sup>lt;sup>35</sup> G. C. Boon, "Segontium Fifty Years On, The Coins," *Archaeologia Cambrensis* 125 (1976), pp. 68-72.

<sup>&</sup>lt;sup>36</sup> Callu and Garnier (above, n. 28), pp. 297-99.

<sup>37</sup> Bastien (above, n. 8), I 31-I 37.

<sup>38</sup> Lallemand (above, n. 30), p. 79.

<sup>39</sup> Lallemand (above, n. 31), p. 69.

<sup>40</sup> Callu and Garnier (above, n. 28), pp. 306 7.

<sup>&</sup>lt;sup>41</sup> R. A. G. Carson and J. P. C. Kent, "A Hoard of Roman Fourth Century Coins from Heslington, Yorkshire," NC 1971, pp. 221-25.

buried about 358 give some idea of the relative proportions of the last four outbreaks of counterfeits that we are studying here, and in particular of the two different series of *Fel temp reparatio*.

Types	Heslington	Oldcroft
Gloria exercitus, Urbs Roma,		
Constantinopolis etc.	22	6
Victoriae Dd Auggq Nn	3	0
Fel temp reparatio (348–50)		
Galley	45	41
Phoenix	0	<b>2</b>
Magnentius (350–53)	372	250
Fel temp reparatio (354–58)		
Fallen Horseman	844	1123
(and some reverses of Magnentius		
for Constantius II and Gallus)		
Various, overstrikes	300	222

The Fel temp reparatio imitations issued from 348 to 350 in Gaul, Britain, the Danubian provinces and Egypt respect on the whole the module of the originals, but their average weight is less than the official coins. The type with galley is the one most often reproduced, while imitations with the hut are relatively rare. As for the type showing the fallen horseman, the specimens with a big module belong to this period of imitations, at any rate so far as the ones circulating in Gaul and Britain are concerned. They ceased in fact to be issued as soon as Magnentius seized control and were replaced by imitations of the new types created by the usurper. But in the Balkan regions and in Egypt the situation is not the same and copies of maiorinae with the fallen horseman on the reverse continued to be produced for some years, probably until 353, with a tendency toward smaller modules and lower weights. A few imitations of 348–50 bearing the Lyon mark give an idea of their



<sup>&</sup>lt;sup>43</sup> The *Fel temp reparatio* coins with the hut are in fact 5/6 of maiorinae, which explains why they are imitated much less often.

weight and diameter, which were very close to those of the originals: galley type, 14 specimens, between 20 and 22 mm and between 3.56 and 7.50 g, average 5.17 g; hut type, 2 specimens, 20 mm, 3.25 and 4.08 g; fallen horseman type, 4 specimens, 21 and 22 mm, between 4.63 and 7.42 g, average 5.99 g.44 Obviously we are dealing here with a selection of imitations, and the average weight of a larger number of specimens would probably lie below the standard of the maiorina, which is about 5.20 g. This is the case in a series of imitations of maiorinae published by M. R. Vasic, some of them coming from the Boljetin hoard.45 We have put aside the specimens described as being cast, although their number does not coincide with what the author writes in his publication of the hoard: "It should also be noted that all these specimens are cast, as everywhere else in the Roman empire."46 We cannot accept this statement, the majority of imitations of this period being well struck. Moreover, all the imitations from Boljetin reproduced on pl. 30 are of different obverses and reverses. If they had been cast, they would have been based on a large number of struck imitations. There is a problem here that can only be resolved by a fresh examination of the material. However that may be, if we follow M. R. Vasic's catalogue we can count three specimens of the galley type, weighing 5.20, 4.80, and 3.30 g, and one of the hut type, weighing 3.90. The 18 specimens of the fallen horseman type have diameters varying between 19 and 22 mm and weights of 2.80 to 6.00 g, with an average of 4.54 g. Five imitations of the Fel temp reparatio fallen horseman type from the hoard at Luxor in Egypt may date, like those of Illyria, from the period 348-53. With a module slightly smaller than the normal one, they weigh 1.55, 2.99, 3.15, 4.88 and 5.68 g, that is, an average weight of 3.65 g.47

Imitations of the coins of Magnentius are extremely numerous. They can be divided into two groups, one consisting of copies approximating the module of the maiorina, the other to that of the half maiorina. Imitations of standard coins generally weigh distinctly less



<sup>44</sup> Bastien (above, n. 8), I 38-I 57.

<sup>45</sup> Vasič (above, n. 21), pp. 127-30, pl. 30.

<sup>&</sup>lt;sup>46</sup> M. R. Vasiè, "Le trésor de Boljetin (Ive siècle)," Sirmium 8 (Rome-Belgrade, 1978), p. 143.

<sup>&</sup>lt;sup>47</sup> P. Bastien, "Imitations Fel temp reparatio en Egypte (trouvaille de Louxor)," BSFN 10 (1982), pp. 258-59, 1-5.

than official coins, as is shown by the table below, which lists both the variations in the average weights in the various mints for the first six phases of the coinage<sup>48</sup> and the average weights of imitations bearing the Lyon marks.<sup>49</sup>

Average Weights from Official Mints		Average Weights of Imitations
First phase:	5.09-5.17	
Second phase:	4.95-5.02	13 specimens: 4.30
Third phase:	5.01-5.30	10 specimens: 3.71
Fourth phase:	4.72-5.05	
Fifth phase:	4.44-4.73	29 specimens: 4.02
Sixth phase:	3.88-4.46	

The progressive decline in the weight of the official majorina was thus followed by the imitations. In addition, the average weights of these copies are excessive, for they are based on specimens chosen for illustration. For the fourth to sixth phases we had obtained a much lower average: 3.17 g, based on 131 specimens from the hoard in the Lyon region.<sup>50</sup> Imitations of half maiorinae, generally the Victories type, are frequently discovered in excavations and also occur in hoards. The hoard of Les Fontaines-Salées, which we shall take as an example, includes specimens of the two principal types of these imitations. The first, with the reverse of the two Victories, approximates the module of the half maiorina and the 7 copies of 15 to 17 mm weigh from 1.02 to 1.81 g, with an average of 1.46 g.51 The second, with the same reverse, is represented by 54 specimens, with the same dies often recurring. The diameter of these copies varies from 12 to 14 mm and the weights range from 0.33 to 1.51 g. The average weight is 0.86 g and a histogram shows a regular curve for this homogeneous batch, with the peak at



<sup>48</sup> Bastien (above, n. 14), pp. 222 23, table 3.

<sup>49</sup> Bastien (above, n. 8), I 60-I 82, I 84-I 109, I 115.

 $<sup>^{50}</sup>$  P. Bastien, "Trésor de monnaies de bronze de Magnence et Décence," RBN 1962, pp. 59-65, 328-458.

<sup>&</sup>lt;sup>51</sup> G. Fabre and M. Mainjonet, "La trouvaille monétaire des Fontaines-Salées (Yonne)," *Gallia* 23, 1 (1965), pl. 4, 79–85.

0.80 g.<sup>52</sup> The authors regarded this collection as regular coinage from the Lyon mint, but these coins can only be imitations, because of their very light weights, the style of the portraits and the gross errors in the inscriptions. The figure of 0.86 g approximates the average weight of small imitations of the types Gloria exercitus, Urbs Roma, Constantinopolis and Victoriae Dd Auggq Nn.

Imitations of the bronze coins of Magnentius's reform inscribed Salus Dd Nn Aug et Caes are far less numerous than imitations of the maiorinae and half maiorinae issued from 350 to 352. They copy the modules of the coins of the first issue and of the two reductions which followed it. In Le Monnayage de Magnence we reproduced two copies with a large module weighing 12.80 and 6.96 g, a copy of the first reduction, 5.59 g, and two with the module of the second reduction, weighing 3.92 and 3.00 g.53 We add 4 new specimens with a large module, 10.13 and 6.31 g, with that of the first reduction, 6.98 g, and with that of the second, 3.68 g.54 Two imitations with a large module from a hoard of 120 coins of Magnentius's reform weigh 7.53 and 9.09 g.55 These few metrological indications suggest that the forgers cannot have departed far from the weights of the prototypes.

The fifth epidemic series of imitations followed the reign of Magnentius and copied the half maiorinae Fel temp reparatio of the fallen horseman type which in 354 replaced the maiorinae. A very large number of these counterfeits was produced. Their circulation covered Gaul, Britain, where they are particularly numerous, the Iberian peninsula, Egypt and possibly to a lesser extent the Danubian provinces and Asia Minor. Diameters vary from that of the half maiorina to that of the minimissimi. As with the series Gloria exercitus, Urbs Roma and Constantinopolis, it looks as if the module was progressively reduced during the four years or more in which this coinage circulated. A few publications demonstrate the great variety in module and weight of these copies. Eight imitations bearing the Lyon marks have diameters between



<sup>&</sup>lt;sup>52</sup> Fabre and Mainjonet (above, n. 51), p. 159, 113-66 and pl. 5.

<sup>53</sup> Bastien (above, n. 14), p. 217, pl. 18, 59 60, 58, 61 and 62 respectively.

<sup>&</sup>lt;sup>54</sup> Bastien (above, n. 8), I 116-I 118 and I 120.

<sup>&</sup>lt;sup>55</sup> R. Weiller, "Ein Münzschatzfund aus der Zeit des Kaisers Magnentius," APA 1 (1970), pp. 187-89, 119-20.

10 and 17 mm and weights ranging from 0.90 to 2.70 g.56 Among the coins from the Sambre at Namur J. Lallemand counts 3 Fel temp reparatio imitations of 15 to 17.1 mm, weighing 1.35, 1.96 and 2.68 g. Five others weigh between 0.31 and 0.80 g, with an average of 0.57 g for diameters of 7.5 to 11.5 mm.<sup>57</sup> At Saclas 58 imitations of the same type have an average weight of 0.59 g.58 At Les Fontaines-Salées 8 imitations of 8 to 17 mm weigh from 0.57 to 1.31 g, with an average weight of 1.05 g.59 A very substantial number come from Camp-Ferrus. 60 The 141 specimens, with diameters varying from 5 to 18 mm but forming, to judge by the photographs, a homogeneous group, weigh between 0.05 and 1.63 g; only three exceed 1 g. The average weight works out at 0.36 g. At Segontium, 7 other specimens range between 0.80 and 1.26 g.61 Finally, a homogeneous batch of 11 Egyptian imitations, with a diameter slightly smaller than that of the half maiorina, weighs on the average 1.96 g.62 Overstrikes of the Fel temp reparation type, generally discovered in Britain, cannot be used in a metrological study, but they pose interesting problems to which we shall return.

The creation in 358 of the Spes Reipublice, weighing under 2.00 g, provoked only a limited production of imitations. Many catalogues of coins from sites and hoards do not list any at all or mention only one or two specimens. In this respect Camp Ferrus is worth noting, for 20 copies of this type were discovered there, one of 13 mm weighing 1.52 g and 19 of 5 to 11 mm and 0.07 to 0.83 g, with an average of 0.33 g. It is certain that the wide circulation of reduced siliquae, the striking of which began at the same period, reduced the role of bronze, which it was less profitable to copy. Forgers were going to turn their attention at this point to the imitation of silver coins.

Imitations of the bronze coins inscribed Vot X Mull XX and Securitas Reipub are relatively rare. J. P. C. Kent thinks that "the Julian 'Bull' type attracted a great deal of imitations during its short ca-

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<sup>56</sup> Bastien (above, n. 8), I 121-I 128.
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<sup>&</sup>lt;sup>57</sup> Lallemand (above, n. 30), p. 79, 269-72 and 275-78.

<sup>58</sup> Callu and Garnier (above, n. 28), p. 306.

<sup>&</sup>lt;sup>59</sup> Fabre and Mainjonet (above, n. 51), pl. 5, 167-74.

<sup>60</sup> Depeyrot (above, n. 34), pp. 15-16, 441-581.

<sup>61</sup> Boon (above, n. 35), p. 74, 743-49.

<sup>62</sup> Bastien (above, n. 47), pp. 258-59, 6-16.

<sup>63</sup> Depeyrot (above, n. 34), p. 16, 582-601.

reer,"64 but it does not look as if the phenomenon was very widespread. We have not in fact found any substantial series of imitations of Julian's bronze coins in the inventories of sites and hoards, and we shall confine ourselves to giving weights and diameters of copies of the Lyon mint, 3.23 to 8.35 g for modules of 21 to 25 mm,65 and of two others with an illegible mark, 6.64 g and 22 mm, 7.33 g and 24 mm.66

In conclusion, the metrological problem of the imitations of 318-63 needs to be reconsidered as a whole, on the basis of a substantial number of coins weighed, measured and photographed. However, a certain number of observations can be offered from the preceding data for the five principal series of imitations. Imitations of the nummi of the reform of 318 are usually struck on disks with a module close to the normal one, and the average weight represents about 4/5 that of the originals. Imitations of the late Constantinian Gloria exercitus and similar types at first reproduce the official coins with a diameter near the models and a weight below the normal. The copies then grow progressively smaller and end up as minimissimi of 7 mm or less. Homogenous batches of minimi like that from Rheims have an average weight of 0.61 g, while others, comprising specimens with a module of less than 12 mm, vary in average weight from 0.60 to 0.92 g. Imitations of the maiorinae Fel temp reparatio of the reform of 348 are characterized by a weight and diameter close to those of the prototypes. Certain copies distinctly exceed the majorina in weight but the average weights tend to fall below those of the regular coins. Imitations of the Magnentius maiorinae have in general a good module, but weigh roughly a gram less than the official coins. Imitations of the half maiorinae are of two types. Either they are close to their model with an average weight of about a gram less, or they have a smaller module, from 12 to 14 mm, and weigh less than a gram. They rarely evolve toward the module of minimi. Imitations of the half maiorinae Fel temp reparatio of the fallen horseman type, issued since 354, at first reproduce the originals, with a good module and a slightly lower weight, but, as with copies of the second series, weights and diameters diminish and end up as minimi weighing



<sup>64</sup> RIC 8, p. 90.

<sup>65</sup> Bastien (above, n. 8), I 129-I 132.

<sup>&</sup>lt;sup>66</sup> P. Bastien, "Imitations du monnayage des Tétrarques et de la famille constantinienne," *BCEN* 2 (1981), pp. 37-39, 30-31.

on average less than 0.40 g in the case of a substantial lot such as that of Camp Ferrus. Compared with these five substantial outbreaks of imitations, copies of *Victoriae Dd Auggq Nn*, *Spes Reipublice*, *Vota* and *Securitas Reipub* play only a secondary role. By and large, during this long period there were imitations which approximate in weight and module to the official coins and a vast production of small copies whose weights vary between 0.30 and 0.90 g.

#### **ENGRAVERS**

One of the problems which confronts the numismatist is that of defining the imitation, that is, tracing the limits which make it possible to distinguish an official coin from a copy of it. This is not always easy, especially for imitations of the nummi of the reform of 318 and those of the Magnentian period. During these two periods the forgers sometimes engrave portraits of a quality close to that of the originals and some reverses cannot be distinguished from those of the regular coins. The good imitation can be recognized either by a portrait that is well executed but in a style differing from that of the official portraits, or else by small defects of engraving or anomalies in the ductus of the letters. But, after all, the imperial coinage also offers examples of abnormal manufacture. Thus in the absence of objective criteria everyone interprets the coin subjectively. One person will regard it as official, another as only a counterfeit. Long practice makes it possible to be more confident in diagnosing an imitation, but in some cases it is quite simply impossible to make up one's mind. Consequently we find scholars introducing into a corpus of official coins issues described as "irregular," a term which reflects the author's doubt. If there is any doubt, the coins should not figure in the corpus. This is the case with P. M. Bruun when he writes about the coinage of 318-25.67 For the same period others content themselves with reproducing the suspect coin and classifying it as an official series, while expressing their uncertainty.68 And so far as the Magnentian period is concerned one must part com-



<sup>&</sup>lt;sup>67</sup> RIC 7 (Trier), pp. 200-201, 416-28; (Siscia), pp. 436-37, 100-108; pp. 440-41, 134-39.

<sup>68</sup> Bastien (above, n. 20), nos. 81, 107, 155, 156, 176, 191a-191b.

pany with RIC 8, which describes specimens that are certainly copies.<sup>69</sup> From the abundant evidence at our disposal we shall choose two cases which will lead us to various reflections on the engraving of the dies and their employment in irregular workshops.

The first is a copy of a nummus of Constantine II from the Lyon issue Beala tran-quillilas. The prototype depicts a bust of the emperor with cuirass and paludamentum seen from back, and the inscription CON-STANTINVS IVN NOB C (Plate 44, 52).<sup>70</sup> The imitation has a quite well engraved portrait but one very different from the usual type. As is often to be observed in this type of copy, the part of the paludamentum resting on the left shoulder is badly interpreted by the engraver, who transforms it into a sort of hook in front of the bust. The inscription CONSTANTINVS IVN N CAES is quite abnormal. On the other hand, one can make no criticism of the reverse (Plate 41, 53).<sup>71</sup>

The second is an imitation of a Magnentian maiorina. On the obverse one sees an excellent portrait of the emperor and a correct inscription, but behind the bust a very unexpected **B** instead of an **A**, mark of the maiorina. The reverse, the two Victories with cippus, is of extremely awkward execution. Beyond a doubt, it is an imitation (Plate 44, 55).<sup>72</sup> For comparison, we reproduce an official coin of the same type (Plate 44, 54):<sup>73</sup> the portraits on these two coins indeed seem to come from the same hand.

Numerous similar cases exist and from them we can deduce two facts: first, that reverse dies could temporarily be taken away from the imperial mints to be utilized in counterfeiters' workshops, and second, that some official engravers were clandestinely working in these workshops. In the case of the Magnentian imitation the *scalptor* realized an excellent portrait, but by ignorance the one who reproduced the letters transformed an A into a B.

We have never seen imitations made with an official obverse die and a counterfeit reverse die. This is explained by the fact that obverse dies



<sup>&</sup>lt;sup>69</sup> Bastien (above, n. 14), 2nd ed. (Wetteren, 1983), nos. 150, 156-58, 174a; pl. S7, *RIC* 8, 111, 113 (2), 114, 127.

<sup>70</sup> Bastien (above, n. 20), 149.

<sup>&</sup>lt;sup>71</sup> Bastien (above, n. 20), pl. 24, I 46.

<sup>&</sup>lt;sup>72</sup> Bastien (above, n. 8), I 88.

<sup>&</sup>lt;sup>73</sup> Bastien (above, n. 8), no. 153.

showing the imperial effigy were kept under lock and key after use, whereas the reverse dies remained in the officinae.<sup>74</sup>

The clandestine activity of official engravers was well known at the time imitations of nummi were issued following the reform of 318, as is evidenced by a law of emperor Constantine, dated November 20, 321: "Quoniam nonnulli monetarii adulterinam monetam clandestinus sceleribus exercent . . . "75 After E. Babelon, some have deduced from this law that the monetarii were working at home for official mints.<sup>76</sup> In fact nothing of the kind is mentioned by ancient writers. Even the text of Sozomen is not explicit on this point. Recently J.-P. Callu<sup>77</sup> reinterpreted this text and agrees with the opinion of E. Babelon and the more recent one of J. H. W. G. Liebeschuetz.<sup>78</sup> But can we be sure that monetarii living in Cyzicus with their families were really working at home? The number of coins they had to provide each year according to the status of their corporation could certainly have been produced at the mint itself. One cannot see the monetary administration giving its workers the use of obverse and reverse dies without any control. This latitude would have allowed clandestine fabrication of official coins, easy to put in circulation. Several laws of the fourth century express the constant preoccupation of the imperial administration with its coinage and it is hard to believe in widespread and more or less unverified minting.

So it seems that in the illegal workshops there were good engravers, certain of them employed in the official mints and others of poor ability or quite inexperienced. For the tetrarchic period we have already established this association. Of two folles struck with the same reverse die the first has an obverse die of good quality and the second is quite unskillful.<sup>79</sup>



<sup>&</sup>lt;sup>74</sup> P. Bastien, "Folles de l'atelier de Lyon frappés avec le même coin d'effigie dans deux officines distinctes," SM 39 (1960), p. 75-77.

<sup>&</sup>lt;sup>75</sup> Cod. Theod., 9, 21. 2, in Th. Mommsen, I<sub>2</sub> (Berlin, 1954), p. 471.

<sup>&</sup>lt;sup>76</sup> E. Babelon, Traité, vol. I, col. 870; J. Maurice, Numismatique constantinienne, 1 (Paris, 1908), p. 372.

 $<sup>^{77}</sup>$  J.-P. Callu, "Sozomène, V, 15 et la corporation des monétaires," BSFN 7 (1972), p. 271–73.

<sup>&</sup>lt;sup>78</sup> J. H. W. G. Liebeschuetz, Antioch, City and Imperial Administration in the Later Roman Empire (Oxford, 1972), p. 57-58.

<sup>&</sup>lt;sup>79</sup> P. Bastien, "Imitations de folles de la première tétrarchie," RIN 1980, p. 127-28.

In our opinion this makes less convincing the classifications by degree of quality proposed by some numismatists. P. V. Hill, to whom we are indebted for extensive research on the irregular coinage of the third and fourth centuries, divides those of the fourth century into three categories: the first includes well-reproduced specimens but with some errors in the inscriptions, the second those with degenerated portraits with an occasional tendency toward stylization and the third, barbaric coins. M. R. Vasic sees four groups in the imitations of the period 318–33081 and G. C. Boon reduces them to two in the first two *epidemic* series of imitations. See

We believe that a statistical study of dies for a given issue would show that the various categories proposed are in fact mixed. Even on minimi we observe good portraits and others of barbaric style. In a homogeneous hoard such as the one found at Rheims, busts of nos. 22, 27 and 29 are skillfully engraved while those of nos. 7, 18 and 35 are particularly clumsy.<sup>83</sup>

In mints of counterfeiters as in official mints, dies can be reengraved. A good example of this practice can be seen in the homogenous lot of *Fel temp reparatio* imitations in the Luxor hoard. An obverse die was modified twice: first by suppressing a great part of the diadem and replacing it by the letters CONST, and second by trying to suppress this inopportune inscription on the imperial head (Plate 44, 56-58).84

There is a special problem about some inscriptions. There are imitations, almost always of the *Fel temp reparatio* fallen horseman type (there is one exception of the galley type), that bear the inscriptions DOMINO CARAVSIVS CES (and variants) or CENSERIS. Some British numismatists propose the existence of a usurper, Carausius II. These imitations, even if they refer to an actual personage, must be classified as copies struck after 354.85



<sup>&</sup>lt;sup>80</sup> P. V. Hill, "Barbarous Imitations of Fourth-century Roman Coins," NC 1950, p. 234.

<sup>81</sup> M. R. Vasiè, "Les imitations de la monnaie romaine des 1ve et ve siècles, "Frappe et ateliers monétaires dans l'antiquité et le moyen-age (Belgrade, 1976), p. 80.

<sup>82</sup> Boon (above, n. 2), p. 129.

<sup>83</sup> Callu and Garnier (above, n. 28), p. 297.

<sup>84</sup> Bastien (above, n. 47), p. 258-59.

<sup>&</sup>lt;sup>85</sup> See J. P. C. Kent, "Carausius II-Fact or Fiction?" NC 1957, p. 78-83; Boon (above n. 2), p. 134-35.

# **OVERSTRIKES**

Use of official or imitated coins for striking new types is an old practice in counterfeiters' workshops. The bronze coinage of Postumus provides numerous examples of it. During the fourth century it happens chiefly in Britain. J. W. E. Pearce has observed that 64 imitations of the Fel temp reparatio fallen horseman type were overstruck on the following official coins: Gloria exercitus two standards (7 specimens), one standard (17 specimens), Urbs Roma (5 specimens), Constantinopolis (3 specimens), Pietas Romana (1 specimen), Victoriae Dd Augga Nn (17 specimens), Fel temp reparatio of various types (6 specimens), unidentified (8 specimens).86 C. H. V. Sutherland and J. P. C. Kent returned to this problem several times<sup>87</sup> and G. C. Boon, studying it with more material, was able to confirm that overstrikes from this period are above all a British phenomenon.88 The Heslington hoard gives us a particularly clear example of that. It contains 297 overstrikes made in irregular mints. One of them, of the Fel temp reparatio fallen horseman type, is struck on an imitation of the Victoriae Dd Auggg Nn type, the remaining 296 being struck on official coins. The latter are: 1 Felicitas Reipublice of Magnentius on a Gloria exercitus with two standards, 1 Victoriae Dd Nn Aug et Caes of Magnentius on a Gloria exercitus with one standard and 294 Fel temp reparatio fallen horseman of Constantius II on 1 Tetricus, 1 Requies, 52 Gloria exercitus with two standards, 29 Gloria exercitus with one standard, 28 Urbs Roma, 19 Constantinopolis, 6 Pax publica, 1 Pietas Romana, 68 Victoriae Dd Auggg Nn, 1 Fel temp reparatio phoenix, 22 Fel temp reparatio fallen horseman and 66 of uncertain identification.89

Compared to this important British coinage, overstrikes from the continent and the east are rare. J. W. Pearce has noted three



<sup>&</sup>lt;sup>86</sup> J. W. E. Pearce, "Barbarous Overstrikes Found in Fourth-Century Hoards," NC 1939, p. 270, pl. 15.

<sup>&</sup>lt;sup>87</sup> C. H. V. Sutherland, "Carausius II, Censeris, and the Barbarous *Fel Temp Reparatio* Overstrikes," *NC* 1945, p. 125-33; Kent (above, n. 85), p. 81-82, and "Barbarous Copies of Roman Coins: Their Significance for the British Historian and Archaeologist," *Limeskongress* (Rheinfelden-Basel, 1957), p. 65.

<sup>88</sup> Boon (above, n. 2), p. 131.

<sup>89</sup> Carson and Kent (above, n. 41), p. 224.

Fel temp reparatio fallen horseman overstruck on Fel temp reparatio with two captives from an eastern hoard. From a previous period R. Delmaire has reported an overstruck radiate with a Constantinopolis obverse and an Urbs Roma reverse. 91

This abundance of overstrikes of the Fel temp reparatio fallen horseman type in Britain can be explained by a law enacted by Constantius II on March 8, 354.92 This rescript, so important in many respects and once again severe against counterfeiters, cites several types of coins for which J. W. E. Pearce, 33 followed by other scholars such as J. P. C. Kent 44 have proposed the following interpretation: 1) the pecuniae in usu publico constitutae were the legal coins (namely, the half maiorinae Fel temp reparatio fallen horseman of the 354 reform); 2) the pecuniae maiorinae represented the maiorinae of the 348 reform which had been struck until 354 and were no longer valid currency; 3) the centenionales communes comprised the nummi issued from 318 until 348 (these were no longer valid currency either); and 4) the pecuniae vetitae were prohibited coins and had to be those of Magnentius.

So the demonetized coins were gathered by British counterfeiters and overstruck with the new *Fel temp reparatio* reverse, the only one henceforth in use. Why did these overstrikes occur chiefly in Britain? Probably because a great number of the demonetized nummi were still in circulation in this part of the Empire.

### **GEOGRAPHY-CHRONOLOGY**

We shall confine ourselves to the five *epidemic* issues, these being the only ones related to an economic phenomenon whose causes, still poorly understood, will be discussed in the next section.



<sup>&</sup>lt;sup>90</sup> J. W. E. Pearce, "Barbarous Overstrikes found in Fourth-Century Hoards: Some Additional Evidence from the East," NC 1940, p. 162-63.

<sup>91</sup> R. Delmaire, "Monnaies romaines des fouilles de la cathédrale de Thérouanne (Pas-de-Calais)," Revue du Nord 239 (1978), p. 780, 65 = p. 785, 360.

 $<sup>^{92}</sup>$  Cod. Theod., 9. 23, 1, Mar. 8, 356,  $\rm I_2,~p.~475;~date~corrected~by~\it{PRLE}~1,~p.~783.$ 

<sup>93</sup> Pearce (above, n. 86), p. 282-83.

<sup>94</sup> RIC 8, p. 65.

Imitations of the types following the reform of 318 do not present serious problems concerning their geographical distribution. circulated chiefly in Gaul, in the Danubian provinces and in Britain. We have already drawn attention to the rather small percentage of these imitations in hoards buried after 318.95 But these percentages are likely to be biased on the low side, hoarders having probably eliminated imitations of poor style or low weight. In addition, good imitations may have been classified as official coins when the inventories of these hoards were made. The percentages obtained for some of these hoards are as follows: Gaul, Ermsdorf, 2,764 specimens, 65 imitations (2.35%), Nodebais, 465, 1 (0.21%), Neuss, 1,021, 1 (0.49%), Chavannes, 1,037, 21 (2.02%); *Danubian provinces*, Nagytétény, 10,585, 21 (0.20%), Bikiè-Do, 10,590, 30 (0.28%), Flavia Solva, 639, 5 (0.79%), Petronell, 231, 1 (0.43%), 96 Bulgaria, 74, 0,97 Britain, Freston, 2,624, 2  $(0.08\%)^{98}$  Llanbethery, 814, 2  $(0.25\%)^{99}$  Warsop, 341, 6  $(1.76\%)^{100}$ Bentford, 67, 1 (1.49%).101

As far as the chronology of these imitations is concerned, it is clear that their manufacture followed issues of official coins, as is proven by analyzing hoards from before and after the reduction of 330. A small hoard found in northern France begins with *Victoriae laetae* and ends with *Providentiae* from Trier and London and *Virtus Augg* from Arles; this hoard contains 84 specimens including two imitations of *Sarmatia* and *Providentiae*. The Chavannes hoard stops with emissions of types *Providentiae*, *Securitas*, *Salus* and *Spes* and the imitations copy contemporary *Providentiae* and *Virtus Augg* from Arles.



<sup>95</sup> Bastien (above, n. 20), pp. 108 11.

<sup>96</sup> Bastien (above, n. 20), pp. 108-11.

<sup>&</sup>lt;sup>97</sup> B. Overbeck, "Ein Schatzfund von Folles aus Bulgarien," *Chiron* 1 (1971), pp. 407-17, pls. 7-11.

<sup>&</sup>lt;sup>98</sup> E. Owles, N. Smedley and H. Webb, "A Hoard of Constantinian Coins from Freston, Suffolk," NC 1972, pp. 156-57.

<sup>&</sup>lt;sup>99</sup> G. C. Boon, "A Constantinian Hoard from Llanbethery, near Barry, Co. Glamorgan," NC 1960, p. 264.

<sup>&</sup>lt;sup>100</sup> R. F. Bland and R. A. G. Carson, "Warsop (Notts.) Treasure Trove of Constantinian Folles," NC 1974, pp. 53-64.

<sup>&</sup>lt;sup>101</sup> J. Casey, "A Hoard of Constantinian Reduced Folles from Bentford, Middlesex," NC 1972, pp. 141-42.

 $<sup>^{102}</sup>$  P. Bastien, "Trouvaille de monnaies constantiniennes (317-328)," RBN 1964, pp. 53-68, pls. 5-6.

In the Bikiè-Do hoard 10,581 of the specimens were issued until 324; the latest coins, of the Vola type, also appear as imitations. The Nagytétény treasure closes after the reform of 330 and imitations copy types issued between 318 and 330 but do not copy nummi issued after 330. That is not the case for Warsop, where the hoard is made up of coins issued between 318 and 330, with the exception of a Soli invicto comiti preceding 318 and of 8 nummi struck after 330 (4 Gloria exercitus, 2 Urbs Roma and 2 Constantinopolis); yet, of the 7 imitations, 6 are of Beata, Vola and Virtus Augg, whereas the last one is an Urbs Roma from Trier. This is a particularly good example of the contemporaneity of imitations, which proves that counterfeiters immediately abandoned the 1/96 pound nummi for 1/132 nummi as soon as circulation of the latter began.

Imitations of the types following the reforms of 330 and 336 are abundant. From the evidence gathered from hoards and from coins found on sites, we know that they circulated mainly in Gaul and Britain. The corpus by J.-P. Callu and J.-P. Garnier clearly demonstrates this, and also shows that these copies did not circulate very much in the rest of the Empire. A few specimens have been discovered in northern Italy, the Iberian peninsula, Algeria and Egypt. Two recent publications attest to the rarity of imitations of this period in Syria and Asia Minor. At Apamea (Syria) were found 59 Gloria exercitus and 5 Urbs Roma and Constantinopolis, 104 in Sardis 224 Gloria exercitus, 25 Urbs Roma and 32 Constantinopolis. In both cases, there are no imitations of these types.

In Gaul and Britain the geographical distribution of irregular coinage is deduced from analyses of hoards and inventories of sites. In addition to the study by J.-P. Callu and J.-P. Garnier we shall cite some recent publications. In Gaul the Traben-Trarbach hoard consists of 5 official coins struck before 348, 1 imitation Virtus exercit, 345 imitations Gloria exercitus (one or two standards), Urbs Roma, Constantinopolis, Pax publica, Pietas romana, one imitation Victoriae Dd Auggq



<sup>103</sup> Callu and Garnier (above, n. 28), p. 300-315.

<sup>104</sup> J.-P. Callu, Fouilles d'Apamée de Syrie, 8, 1, Monnaies antiques (1966-1971);
2. Les monnaies romaines (Bruxelles, 1979), p. 15.

<sup>105</sup> T. V. Buttrey, Greek, Roman and Islamic Coins from Sardis: 2, The Roman Coins (Cambridge, Mass., 1981), p. 141-60.

Nn and approximately 650 minimi. It also contains 67 coins struck after the reform of 348, most of them of Magnentius and the others of Salus Aug nostri, struck at Trier for Constantius II by Poemenius. At Camp Ferrus, on the opposite side of Gaul, were found 140 specimens of Gloria exercitus, Urbs Roma, etc. and 24 of their imitations (14.70%). In the Woodeaton hoard from Britain, out of a total of 1,565 coins (8 struck before 330 and the remainder from 330 to 341) there are 90 imitations of the same types (5.78%). The small Bancroft hoard is made up of 76 nummi, 1 struck before 330 and 75 struck between 330 and 341; 19 of these are imitations of Gloria exercitus, Urbs Roma, etc. (25.33%). 109

Since Britain and Gaul were widely supplied with Constantinian imitations between 330 and 341, is it possible that local phenomena played a role in this circulation and even prolonged it in certain areas? When publishing the Cologne fountain treasure, which contains an Urbs Roma and several Fel temp reparatio imitations, M. R. Alföldi, using the historical and archaeological context, dated the filling in of the fountain in 360 and saw in this treasure a sample of the circulation between 355 and 359, the imitations being probably struck during that period. W. Binsfeld, adopting this hypothesis, proposes that the imitations and minimi of the Traben-Trarbach hoard were struck after the reign of Magnentius. J.-P. Callu and J.-P. Garnier have since suggested that the issues of this irregular coinage occurred between 353 and 361, years troubled by Germanic incursions in Gaul. R. Delmaire also reports issues of minimi of this type after 350. Recently,



<sup>&</sup>lt;sup>106</sup> W. Binsfeld, "Eine Zerstörungsschicht des Jahres 353 in Traben-Trarbach," *Trier Zeitschrift* 36 (1973), pp. 119-25.

<sup>107</sup> Depeyrot (above, n. 34), nos. 54-255.

<sup>108</sup> C. E. King, "The Woodeaton (Oxfordshire) Hoard and the Problem of Constantinian Imitations, A.D. 330-341," NC 1978, pp. 38-65, pls. 12-16.

<sup>109</sup> C. E. King, "The Bancroft Roman Villa (Milton Keynes) Hoard of Folles, A.D. 330-341," CH 6 (1981), pp. 40-49, 175.

<sup>&</sup>lt;sup>110</sup> M. R. Alföldi, "Die Münzen aus einer Brunnenverfüllung in Köln," Kölner Jahr. f. vor-und Frühgeschichte 5 (1960/1), pp. 80-84, pl. 18.

<sup>111</sup> Binsfeld (above, n. 106), p. 119.

<sup>112</sup> Callu and Garnier (above, n. 28), pp. 287-96.

<sup>&</sup>lt;sup>113</sup> R. Delmaire, "Notes sur la circulation monétaire au 1ve siècle dans la Région du Nord," BSFN 6 (1983), p. 342.

C.-F. Zschucke was even more specific: according to him, imitations of the last Constantinian coins as well as those of the *Fel temp reparatio* type were struck between 355 and 364, at a time when the Trier mint did not issue bronze coinage. Indeed the only *Spes Reipublice* described in *RIC* 8 is dubious and would require confirmation. Bronze coinage was resumed at Trier under the reign of Valentinian I.

It is difficult to concede that imitations of Gloria exercitus, Urbs Roma and Constantinopolis occurred at such a late date. It is conceivable that Fel temp reparatio imitations could have been produced as late as 358, the date at which the Spes Reipublice began to circulate but it seems unlikely that they were issued until 334. Between 358 and 363, counterfeiters should have imitated in substantial quantities the new Spes Reipublice, Vot X Mult XX and Securitas Reipub coinage. That they did so in small quantities is because starting in 358 massive issues of siliquae reduced the role of bronze. And it seems probable that the Trier region was supplied with silver and bronze coinage by the Lyon and Arles mints while the Trier mint was closed: soldiers and bureaucrats had to be paid.

In the final analysis, the difficult problem is to date the end of the production of imitations of Gloria exercitus and similar issues. Copies of the Victoriae Dd Auggq Nn are somewhat less numerous than imitation Gloria exercitus; this could be explained by the continued issuance of that irregular coinage. J. P. C. Kent confines official Victoriae Dd Auggq Nn to 347–48 and then considers that the absence of regular coinage between 340 and 346 favored continuation of the irregular Gloria exercitus, Urbs Roma and Constantinopolis coinage. This theory is attractive, but the existence of a six to seven year monetary vacuum must be demonstrated.

Be that as it may, it would appear that the minting of Gloria exercitus and similar issues does not go beyond 348, and in fact probably



<sup>114</sup> C.-F. Zschucke, Die römische Münzstätte Trier (von der Münzreform der Bronzeprägung unter Constans und Constantius II 346/348 n. Christus bis zu ihrer Schliessung im 5 Jh.) (Trier, 1982), p. 15.

<sup>115</sup> RIC 8 (Trier), p. 168, 361.

<sup>116</sup> R. Delmaire, "Un trésor d'acs 4 au musée de Boulogne-sur-Mer," *Trésors Monétaires* 5 (1983), p. 178, 91, cites a *Fel temp reparatio* reverse associated with a Julian Augustus obverse.

<sup>117</sup> RIC 8, p. 90.

stops before that. In the Heslington and Oldcroft hoards, probably buried before 358, the proportion of *Gloria exercitus* and similar issues is very small compared to Magnentian and *Fel temp reparatio* imitations, proof that minting of imitations of the 330–41 types was abandoned in favor of types put into circulation following those years.

In the very special case of Traben-Trarbach where nearly 1,000 imitations were hoarded together with 72 official coins, one can date burial toward the end of 353 or beginning of 354, the irregular coinage having been assembled in a previous period.

From the module of the Gloria exercitus, Urbs Roma and Constantinopolis we can deduce some chronological data. The average weights obtained for the Lyon (1.50 g) and Liberchies (1.37 g) specimens with 13 to 17 mm modules are far from those of the year 330 reduction to 1/132 of a pound (2.44 g), but close to those of the year 336 reduction to 1/192 of a pound (1.68 g). 118 It is therefore probable that the great outbreak of imitations started closer to 336 than to 330, although the first copies of Gloria exercitus with two standards must have followed closely the reform of 330 and are usually more abundant in the hoards than those with one standard. In other words, the epidemic outbreak would have been preceded by an endemic period. Eventually the modules shrink to between 12 and 7.5 mm, sometimes even less, removing a discernible distinction between the high diameter imitations and the minimi. It would also appear, based on the Rheims hoard, that imitations of different modules were issued at the same time. The Traben-Trarbach treasure gives us a good view of these two phases, the first being represented by 345 specimens and the second by about 650 minimi.

The imitations created after the reform of 348 of the maiorinae Fel temp reparatio ship, hut, fallen horseman and two captives types and of the half maiorinae ship and phoenix types circulated, as we have said earlier, in Gaul, Britain, the Danubian provinces and Egypt. These imitations are fairly numerous and more frequent in hoards than on sites. As for other periods of epidemic imitations between 318 to 363 we have little information about their circulation in Asia Minor, Syria and Africa. It seems likely that they were rare in those areas. For example,



<sup>118</sup> Bastien (above, n. 20), pp. 67-68.

the little Algerian hoard published by P. Salama, composed of 58 maiorinae of Constantius II and Gallus issued between 351 and 354, does not contain a single imitation.<sup>119</sup>

Concerning the chronology of the issues, it is certain that *Fel temp reparatio* copies of large module were no longer produced in the territories controlled by Magnentius, immediately after his usurpation. But in the territories under the control of Constantius II and Gallus, fabrication of imitations follows that of official coins until 354. We have seen that this is the case in Illyria and Egypt, where copies of maiorinae are rather abundant.

Imitations of Magnentius's coinage circulate mostly in the territories under his control, especially Britain and Gaul, but also in the Iberian peninsula where hoards and isolated coins originating from official mints are common.<sup>120</sup> Occasionally, Magnentian copies are found in other parts of the Empire, for example on the western side of the Danube<sup>121</sup> or in Africa.<sup>122</sup>

Chronologically, copies are struck very soon after the official issues. We have various proofs of this contemporaneity. For example, there is a small German hoard containing 23 maiorinae, all with Gloria romanorum reverses two of which are imitations; 123 also a hoard from the Lyon area made up of 458 maiorinae Victoriae Dd Nn Aug et Caes (or Cae), with or without cippus or with chrism, of which 131 are imitations of the first two types. 124



<sup>&</sup>lt;sup>119</sup> P. Salama, "Petit trésor monétaire romain découvert à Affreville (Chélif)," BSFN 8 (1960), p. 465-67.

<sup>&</sup>lt;sup>120</sup> I. Pereira, J.-P. Bost and J. Hiernard, *Fouilles de Conimbriga*, 3: *Les Monnaies* (Paris, 1974), pp. 106-11, nos. 2438-81 (44 official coins) and 2483-96 (13 imitations).

<sup>121</sup> K. Biró-Sey, "A Hoard of Roman Coins from Perbál," *Folia Arch.* 16 (1964), p. 76 and fig. 2; an imitation of type *Felicitas* together with 525 official coins.

<sup>122</sup> Unpublished documentation of P. Salama. Chéragas hoard: 31 coins ending with Gallus, one Magnentian imitation with a Lyon mark. Cherchell hoard (1960): coins of Constantius II and Julian Caesar, one Magnentian imitation with a Trier mark (Plate 43, 40). See P. Bastien (above, n. 14), pp. 110 and 149.

<sup>123</sup> P. Bastien, "A propos de quelques maiorinae de Magnence," Münstersche Numismatische Zeitung, 11, 3 (May 1981), pp. 31-33.

<sup>&</sup>lt;sup>124</sup> P. Bastien, "Trésor de monnaies de bronze de Magnence et Décence," *RBN* 1962, pp. 49-65, pls. 2-4.

Some imitations in the Fontaines-Salées hoard associate an obverse of Constantius II and a reverse depicting two Victories with a votive shield, Magnentian type, but with the inscription Victoriae Dd Auggq Nn and the mark (?) CON.<sup>125</sup> J.-P. Callu and J.-P. Garnier see in this evidence that imitation coinage of 330–48 continued to be issued after the fall of Magnentius.<sup>126</sup> It is certain that these imitations, which constitute a very unusual use of a reverse inscription of 342–48, a Magnentian monetary type, with an obverse of Constantius II bearing a mark later than 354, could have been struck only after the death of the usurper. Another imitation is even more convincing on this subject since it associates a Magnentius obverse of very good style and a Fel temp reparatio reverse with the mark SPLG<sup>127</sup> which imitates the mark CPLG of the half-maiorinae of Constantius II, Gallus and Julian Caesar (Plate 43, 45).

From these cases, which are rare, one cannot conclude that the imitations of Victoriae Dd Auggq Nn and Gloria exercitus and similar types continued after 353. Posthumous Magnentian copies also raise another problem: either these counterfeiters were nostalgic about Magnentius, or, despite the rescript of March 8, 354, pecuniae vetitae were still circulating and were used as models for imitations. In either case this would be a violation of the laws of Constantius II and striking of copies must have ceased soon after the end of Magnentius's reign.

Imitations of the half maiorinae Fel temp reparatio fallen horseman type constitute without a doubt the most important of the five epidemic series. Their diffusion is considerable in Britain, substantial in Gaul and somewhat reduced in the Danubian provinces. They also circulated in the Iberian peninsula: for example, at Conimbriga, there are 190 coins of Constantius II and 30 of their imitations (15.79%)<sup>128</sup> and in addition some imitations of Gallus and Julian have been cited. In Asia Minor, the Izmir hoard (2,257 specimens) includes 13 imitations in the 1,195 specimens that have been examined (1.09%).<sup>129</sup> In Egypt,



<sup>125</sup> Fabre and Mainjonet (above, n. 51), pl. 4, 86-89.

<sup>126</sup> Callu and Garnier (above, n. 28), p. 288.

<sup>127</sup> Bastien (above, n. 8), I 121.

<sup>&</sup>lt;sup>128</sup> Pereira, Bost and Hiernard (above, n. 120), pp. 126-29, 2853-3042 and 3043-72.

<sup>129</sup> R. A. G. Carson and J. P. C. Kent, "A Hoard of Fourth-Century Roman Bronze Coins from Izmir," JNG 21 (1971), p. 134-54.

the unpublished Luxor hoard shows the existence of well-organized irregular mints, whose activity continued to increase during the last half of the fourth century and the early part of the fifth century.

Imitations of the half maiorinae Fel temp reparatio fallen horseman type follow the reform of 354. Despite this terminus a quo one could argue that some copies of the fallen horseman maiorinae may be earlier, but with a reduced module. If this in fact happened, it should have been a rare occurence. H. Mattingly proposes delaying the issuance of the Fel lemp reparatio copies until the Pict invasion under Valentinian I. He bases this proposal on the barbaric character of many of these imitations and on the fact that Constantinian coins, having circulated in Britain over a long period of time, must have been overstruck with the Fel temp reparatio reverse at that time. 130 G. C. Boon, from the data gathered in the excavation of the Brean Down temple, which was in use 340-45 and 367-68, estimates that the Fel lemp reparation imitations and especially the minimi must have been struck between those dates.<sup>131</sup> This would mean that such imitations were struck at a time prior to the estimate of H. Mattingly, before the campaign of Count Theodosius against the Picts in 368-69.

In conclusion, we do not have enough information to date with certainty the *terminus ad quem* of this important irregular coinage. It should have stopped or been reduced noticeably after the bronze monetary reform of 358, but it is possible that it may have continued in regions particularly affected by the lack of bronze coinage such as Britain. It is also possible that while fabrication stopped around 358, circulation continued for some time after that.

## **ETIOLOGY**

Can we determine the cause of the *epidemic* waves of imitations between the Constantinian reform of 318 and the death of Julian? The generally accepted answer is that there was a shortage of official coinage. Indeed, each new series of imitations follows a monetary re-



<sup>&</sup>lt;sup>130</sup> H. Mattingly, "Barbarous Overstrikes Found in Fourth-Century Hoards," NC 1939, pp. 280-82.

<sup>&</sup>lt;sup>131</sup> G. C. Boon, "The Roman Temple at Brean Down, Somerset, and the Dating of the 'Minimissimi'," NC 1961, p. 195, and (above, n. 2), p. 130-33.

form which may have caused a withdrawal of the previous coinage and a reduction in mint productivity due to reorganization. In 318 it is the creation of a new nummus and the demonetization of the folles, in 330 and 336 there occur two successive reductions of the nummus, in 348 the maiorina is created, in 350 Magnentius usurps power in the west and monetary types are changed completely, and in 354 all bronze coins are suppressed and replaced in the whole Empire by the half maiorina with the reverse *Fel temp reparatio* fallen horseman type.

According to J.-P. Callu and J.-P. Garnier military events played a large role in the monetary shortage between 353 and 361: the Chnodomar campaign in 352, the occupation of Cologne and many other cities by the Alamanni in 355, followed by their offensive toward the Channel, and Julian's expeditions in Alsace and on the banks of the Rhine between 356 and 360. By drawing a map of the 120 locations where imitations have been found, J.-P. Callu and J.-P. Garnier conclude that they follow the two main lines of attack of the Alamanni: Moselle, Sarre, the Parisian area, and Normandy on one side, Basel and Loire on the other. 132 Certainly these events must have provoked or aggravated an undersupply of official coinage in these areas. On the other hand Britain without a mint since 325 and being dependent on the Gallic mints must have suffered restrictions in its ties with the continent. But war on both sides of the Rhine is not a sufficient explanation for the imitation phenomenon. From 318 to 352 Gaul enjoyed a period of peace and prosperity barely troubled by some localized operations: in 320, Crispus against the Franks, in 328 Constantine II against the Alamanni, in 341 and 342 Constans against the Franks. And it is during these particularly happy times, fortunatus caeli temperie, fructuum proventu, nulla a barbaris formidine, wrote the epitome about Constans, 133 that the first four epidemic waves of imitations occurred. Moreover, even during the invasion of the Alsace plain by Chnodomar in 352 the activity of the Trier mint seems not to have been disturbed.

War might explain the large quantities of imitations for the period 353 to 360, but cannot explain the first four *epidemic* series that we



<sup>132</sup> Callu and Garnier (above, no. 28), pp. 288-93.

<sup>133</sup> Epit. de Caes. 41, 24, ed. F. Pichlmayr and R. Gruendel (Leipzig, 1966), p. 168.

are studying. Given this, one may question whether war is a valid explanation for the last *epidemic* series. Examination of hoards demonstrates the contemporaneity of the imitations and of their official counterparts. In the case of the *Gloria exercitus* as well as other imitations discussed above, the composition of certain hoards (Woodeaton, Bancroft, Llanbethery, etc.) shows that a number of these imitations were in circulation before 341. The *epidemic* phenomenon therefore existed during peacetime.

This brings us to the central question: why did the imperial administration limit production in the western mints and the Alexandria mint, whereas in the east, confronted with serious military problems on the Persian border, no such restrictions appear to have been imposed?

The argument for scarcity due to demonetization must be considered carefully: a monetary reform is prepared long in advance and the amount of necessary coinage can be anticipated and prepared over the period during which the exchange takes place. Furthermore, the official mints were quite capable of producing enough currency and surely could fulfill the work accomplished by the counterfeiters. Consequently, one must conclude that there was a long period of voluntary limitation in the western mints and especially those in Gaul. Why? The answer is probably a deflationary policy tied to economic problems specific to this part of the Empire. The aim may have been to prevent a rise in prices and to maintain the rate of exchange with coins of precious metal, that is to say to avoid a depreciation of the bronze coinage with respect to the gold and silver coinage. If the good imitations of the first, third and fourth epidemic series are sufficient to deceive even modern numismatists, that is not the case for the majority of counterfeit coins of light weight and small module. The latter can only have played a minor role and must have been used only for small transactions. Under no circumstances could these small coins have competed with official coinage; they must have been exchanged at rates that, while not known to us, were undoubtedly quite unfavorable compared to the regular issues.

Is it possible that the Imperial administration "tolerated" the activity of the irregular mints? To support this opinion, some have argued that the same phenomenon has occurred in modern times. For example, in the later part of eighteenth century in England the scarcity of bronze coins gave rise to the minting of numerous tokens;



these illegal issues were in practice accepted by the government.<sup>134</sup> During and for a time after World War I, the same scarcity of small coins prompted the minting of local issues by Chambers of Commerce and local institutions in Belgium and France. The same has recently been observed in Italy. Many scholars have thus been led to assume a "tolerance" or tacit agreement between the Roman administration and the counterfeiters. Let us cite some of their conclusions. W. Hagen assumes that despite the poor quality of the copies, they are officially accepted coinage, coming from an authorized public organization in close collaboration with the Imperial monetary administration.<sup>135</sup> K. Kraft studies the activity of an "auxiliary" mint in the Palatinate. 136 M. R. Alföldi also takes up the thesis of mints tolerated by the administration.<sup>137</sup> G. Fabre and M. Mainjonet attach some Magnentian imitations to the official monetary system as divisional series. 138 C. F. Zschucke endorses the opinion of H. J. Kann, according to which the barbaric imitations are an emergency, semi-official coinage. 139 These opinions are only hypotheses, contradicted by the various Imperial rescripts which, from 318 to 354, oppose counterfeiters and threaten them with severe punishment.<sup>140</sup> It is true that repression of counterfeiting took different forms during the Roman period. P. Grierson<sup>141</sup> notes that under the Principate only counterfeiters who imitated gold and silver coins could be executed, but that there was no legislation against bronze imitations. But under Constantine I, the law of 318 states penalties ranging from perpetual banishment for a decurion to death for a slave. The law of 349 imposed capital punishment on those who extracted silver from majorinae and the laws that followed tended to be even more severe. It does appear that sanctions were in general less



<sup>134</sup> Boon (above, n. 2), p. 95.

<sup>&</sup>lt;sup>135</sup> W. Hagen, "Münzschatz von Metternich aus der Zeit des Kaisers Magnentius," Bonner Jb 145 (1940), p. 103.

<sup>136</sup> K. Krast, "Ein Münzschatz der Zeit des Magnentius aus einer pfälzischen Nebenmünzstätte," Pfälzer Heimat 5 (1951), p. 2.

<sup>137</sup> Alföldi (above, n. 110), p. 82.

<sup>138</sup> Fabre and Mainjonet (above, n. 51), p. 160.

<sup>139</sup> Zschucke (above, n. 114), p. 15.

<sup>&</sup>lt;sup>140</sup> Cod. Theod. (above, n. 75), 9.21.1-21.6, 23.1, I<sub>2</sub> p. 471-76.

<sup>&</sup>lt;sup>141</sup> P. Grierson, "The Roman Law of Counterfeiting," in *Essays Mattingly* (Oxford, 1956), pp. 240-61.

severe for bronze counterfeiting, and that in certain cases amnesties further decreased the penalties. Nonetheless, the official attitude was that there could be no understanding between the Imperial administration and counterfeiters, no matter what the circumstances.

The emperors of the fourth century did not "tolerate" an offense that their laws emphatically condemned, but rather demonstrated an inability to control it. For reasons that should be more thoroughly investigated, they restricted the production of bronze coinage in the western part of the empire and thereby provoked the creation of illegal mints whose production supplied a not-negligible parallel circulation. The importance of this circulation should not be overestimated, although special circumstances aggravated the phenomenon, particularly in Britain which was somewhat isolated during the 355–60 period and in the Trier area where the mint was closed for bronze coinage from 355 to 364; we must add that the composition of British hoards proves that the continental coinage did not cease to cross the *fretum gallicum* during that period.

Many uncertainties remain concerning the problem of fourth century imitations until 363. We must continue to study all aspects of this subject and to publish hoards and site coins with weights and photographs of the specimens. New material, scrupulously studied, would help resolve some of the uncertainties.

## KEY TO PLATES 41-44

- 1. 2.67 † ANS
- 2. 2.49 1 ANS
- 3. 2.40 \ ANS
- 4. 2.49 1 Berlin
- 5. 2.41 † ANS
- 6. 2.47 † ANS
- 7. 3.05 \ Berlin
- 8. 1.67 | Berlin
- 9. 2.55 † ANS
- 10. 1.36 | Berlin
- 11. 0.70 \( \text{ANS}
- 12. 2.49 | Vienna



- 13. 1.51 | ANS
- 14. 1.11 | Belgium, Matagne-la-Grande
- 15. 0.65 

  ✓ ANS
- 16. 1.17 / Vienna
- 17. 1.55 1 Vienna
- 18.  $1.08 \leftarrow ANS$
- 19. 1.73 ↓ Private coll.
- 20. 0.91 | Berlin
- 21. 2.06 | Berlin
- 22. 0.81 | Berlin
- 23. 0.91 | ANS
- 24. 0.68 \ Berlin
- 25. 1.22 | ANS
- 26. 0.80 \ Vienna
- 27. 5.18 ↓ Karlsruhe
- 28. 4.99 | ANS
- 29. 4.08 | ANS
- 30. 3.25 

  ✓ Paris
- 31. 5.58 † Paris
- 32. 2.91 † ANS
- 33. 3.11 ↓ Cambridge
- 34. 3.95 \ Munich
- 35. 4.70 ↓ Brussels
- 36. 2.51 ↓ Private coll.
- 37.  $3.28 \downarrow$  Private coll.
- 38. 3.46 ↓ Vienna
- 39. 2.50 / The Hague
- 40. 1.66 \ Cherchell hoard (Algeria)
- 41. 1.47 ↓ Cherchell excavations
- 42. 1.26 ↑ Copenhagen
- 43. 6.31 | Private coll.
- 44. 6.98 

  ✓ BM
- 45. 1.79 ↓ Paris
- 46. 1.95 ANS
- 47. 2.70 / ANS
- 48.  $0.97 \rightarrow Vienna$
- 49. 0.90 / ANS
- 50. 6.22 ↑ ANS



- 51. 5.16 ↓ Vienna52. 3.22 ↑ Berlin
- **53. 2.85** ↓ Berlin
- 54. 4.25 ↓ Oxford
- 55.  $2.81 \downarrow$  Private coll.
- 56. 2.07 ↓ ANS
- 57. 1.76 ↓ ANS
- 58. 2.99 \ ANS

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# EARLY TWELFTH-CENTURY BOHEMIAN COINAGE IN LIGHT OF A HOARD OF VLADISLAV I

(PLATE 45)

RUTH MAZO KARRAS

A hoard of denarii of Vladislav I (1109–1125), which was lent to the American Numismatic Society, has provided new information on mint operation, chronology of types, and the monetary history of early twelfth-century Bohemia. No other hoards of the period containing several types in large enough numbers to allow a die study or a statistically significant metrological study have been thoroughly published. The ANS hoard, though the exact circumstances of its discovery are not known, allowed such a study.

The ANS purchased 29 denarii of Vladislav I from a dealer in 1981 who reported that the coins came from a hoard he purchased from an Eastern European in Western Europe. One individual had sold him a few of the coins and then informed him where he could purchase the rest of the hoard. When bought, it contained about 250 coins. He broke it down by Cach types<sup>1</sup> as follows: 30 of type 543, 90 of type 545, and 130 of type 547. There were also two specimens of type 541 in the original parcel, but no more of this type in the rest of the hoard. Given

This study was carried out during the summer of 1983 when I was a student in the ANS Graduate Seminar. I am grateful to the staff of the ANS for their help, particularly to Alan Stahl who provided constant guidance.



<sup>&</sup>lt;sup>1</sup> The numbering system of František Cach, Nejstarši České Mince, vol. 2, České a moravské denáry od mincovní reformy Břetislava I do dóby brakléalové (Prague, 1972) is used throughout this paper for ease of reference, though the study of this hoard shows that his chronology of types may be wrong; hereafter cited as Cach.

the lack of documentation of the hoard's provenance, it would be rash to assume that these two were necessarily part of it. The ANS bought one each of types 541 and 543, 13 of type 545, and 14 of type 547. The dealer returned to the ANS in January 1983 with the 168 coins of the hoard that remained in his possession by that time, and left them on loan. In the interim he had sold 20 coins to Baldwin's, who were kind enough to send photographs, with weights and die axes, of those pieces. The total number of coins available for study thus amounted to 1 of type 541, 10 of 543, 92 of 545 and 114 of 547.

## COIN TYPES IN THE ANS HOARD

## VLADISLAV I (1109–1125)

Obv.: + DVX • VVLADISLAVS Bust of duke; to l., tripartite banner, to r., shield.

Rev.: + SC(S •) VVENCEZLAVS Bust of saint holding cruciform scepter between two towers.

## AR Denarii.

↓ 0.77 g, 18 mm (Plate 45, 1). Cach 541; Fiala XV: 20.

Obv.: + DVX • VVLADIZLAVS Duke seated on throne, three-quarter view, blessing kneeling figure.

Rev.: + SCS • VVENCEZLAVS Bust of saint; in r. hand, staff, in l., book.

← 0.70 g, 17 mm (Plate 45, 2). Cach 543; Fiala XV: 17.

Obv.: + DVX (• VVL) ADISLAVS Duke seated on throne between two standing figures.

Rev.: + SCS • VVENCEZLAVS Bust of saint; in r. hand, tripartite banner, in l., branch.

√ 0.76 g, 17 mm (Plate 45, 3). Cach 545; Fiala XV: 18.



<sup>&</sup>lt;sup>2</sup> For this reason and because the number of coins of this type is so small even if originally part of the hoard, type 541 is not included in the chronological and metrological discussions below. It is certainly earlier than the other three types, so it is not relevant to determining the date of deposition of the hoard.

<sup>&</sup>lt;sup>3</sup> Accession numbers 1981.156.1 through 1981.156.29.

Obv.: (+) S • VVE(NCE)ZLA'S • E • ADALBETUS To l., Adalbertus (Vojtech) with crozier; to r., Wenceslaus with spear and shield.

Rev.: + DV (X • VVL) ADIZLAVS Duke seated on throne, facing, sword over 1. shoulder.

← 0.75 g, 17 mm (Plate 45, 4). Cach 547; Fiala XV: 15.

Bohemian coinage of the early twelfth century exhibits two peculiar features in contrast with much of medieval coinage: the art work is of very high quality, and the types change frequently. Examples of the four types found in the ANS hoard are described above. Vladislav I issued a total of 29 types in his reign in Bohemia, not including six types issued at Olmütz in Moravia between 1110 and 1113.5 He ruled Bohemia from October 1109 until his death in April 1125, and had his reign been continuous, he would have averaged not quite two types a year. Vladislay did not, however, rule undisturbed. He became duke of Bohemia upon the death of his cousin Svatopluk in 1109, but from December 1109 to January 1110 he was temporarily deposed by his half brother Bořivoj II, who had previously held the dukedom from 1100 until 1107 when Svatopluk deposed him. Bořivoj probably did not strike coins during the one-month interlude but the strife could have delayed Vladislav in establishing his coinage. At the beginning of 1118, Bořivoj came to the ducal throne again, supposedly upon his reconciliation with Vladislav. Vladislav received as his principality the area of Bohemia



<sup>&</sup>lt;sup>4</sup> On the artistic qualities of the coinage, see J. Květ, "Česká mince doby románské jako výtvarné dílo," Serta Kazaroviana 1 (Serdica, 1901), pp. 195–203 and "Česká Mince Doby Románské," Volné Sméry 31 (1935), pp. 57–60; E. Nohejlová-Prátová, Krása České Mince (Prague, 1955); J. Hásková, Česká Mince v Dobe Románské. Přispevek k ikonografii českých denárů 10–12 století (Cheb, 1975); E. Bachmann, ed., Romanik in Böhmen (Munich, 1977), pp. 233–34; and G. Skalský, "České Mince a Pečeti 11. a 12. Století," Sborník Národního Musea v Praze 1 (1938), pp. 1–58. On iconography in particular, see also V. Ryneš and P. Radoměrský, "Společné úcta sv. Václava a Vojtěcha zvláště na českých mincích a její historický význam," Num Listy 13 (1958), pp. 35–48; Hásková, "K státní ideologii rané feudálních Čech," Num Listy 29 (1974), pp. 71–77.

<sup>&</sup>lt;sup>5</sup> For illustrations of all the types see drawings in Cach, or E. Fiala, České Denáry (Prague, 1896), 2, pls. XV and XVI; hereafter cited as Fiala.

north of the Elbe. He again deposed Bořivoj in August 1120 and became sole ruler.<sup>6</sup>

The coinage situation from 1118 to 1120, when Bořivoj was duke, is unclear. There is no documentary evidence at all for Vladislav's rule in the northern part of Bohemia. That there are no extant charters which might provide a clue does not mean that he was not issuing ducal charters; there are also none extant from periods during which he ruled all of Bohemia.<sup>7</sup> It has been generally assumed that Bohemian pennies were minted only at Prague during this time, and that Vladislav's coins fall into two periods, pre-1118 and post-1120. Any coins which may have been struck for Vladislav during the years 1118–1120 are usually included in the second period.<sup>8</sup> Vladislav, however, could have continued to mint on his own in the north. The minting equipment would have been easily portable. There is no need to posit a break in Vladislav's minting sequence.

A more detailed discussion of the chronology of the different types, based on both hoard evidence and metrology, appears below. Before turning to the chronology and its implications for Bohemian monetary history, however, this paper will examine what the ANS hoard reveals about minting technique and mint organization in the time of Vladislav I.



<sup>6</sup> The only contemporary source for this series of events is Cosmas of Prague's Chronica Boemorum, 3, 43-46, in B. Bretholz, ed., MGH SS Rer Germ N.S. 2 (Berlin, 1923), pp. 217-19; hereafter cited as Cosmas. Modern histories which concentrate on political affairs rely almost solely on Cosmas's account, e.g. Adolf Bachmann, Geschichte Böhmens, vol. 1 (Gotha, 1899), ch. 8, and Bertold Bretholz, Geschichte Böhmens und Mährens bis zum Aussterben der Premysliden (1306) (Munich, 1912), bk. 3, ch. 3. For more recent history focusing less on dynastic struggles, and with a good bibliography, see Karl Richter, "Die böhmischen Länder im Früh- und Hochmittelalter," in K. Bosl, ed., Handbuch der Geschichte der böhmischen Länder, 1 (Stuttgart, 1967), pp. 165-350.

<sup>&</sup>lt;sup>7</sup> No charters of Vladislav I appear in the most modern and complete critical edition, G. Friedrich, ed., Codex Diplomaticus et Epistolaris Regni Bohemiae (Prague, 1904); hereafter cited as Codex. There is one false charter of the thirteenth century attributed to him in vol. 1, pp. 393-403, no. 390.

<sup>8</sup> Fiala, vol. 1, p. 356; Radoměrský, "Peníze Kosmova věku (1050 1125)," Numismatický časopis 21 (1952), p. 103.

## MINTING TECHNIQUES AND ORGANIZATION

Not only the quality of the art work on the coins, but also the technique of die cutting, was very unusual for the twelfth century. In contrast with earlier Bohemian pennies, where the type was cut into the die with a variety of individual punches, on the coins of Vladislav I and his immediate predecessors and successors the type was all on one punch. For the twelfth century the consequence was that diecutters did not have to be artists; all they had to do was stamp the type into the die and then cut the legend using individual letter punches. A die study therefore becomes extremely difficult, as the placement and spelling of the legend and occasional die breaks are often the only distinguishing features. In some types, there are a few features that differ from die to die and therefore must have been carved into each die individually: for example, the banner on the reverse of type 545 (Plate 45, 5a, b).

It is possible to detect a gradual punch breakdown on the reverse of type 547 (Plate 45, 6a-c). Although scholars have generally referred to this face as the obverse because Vladislav appears on it, both the die study and the curvature of the flan on coins struck off-flan show that it is the reverse. Number 6a is the original state of the punch and numbers 6b, c and d show progressive breakdown in Punch State 2: a chunk is being chipped away on the bottom of the throne. The band of cross-hatching on the bottom of the throne is an element that differs from die to die. No. 6e illustrates Punch State 3. The bottom of the throne has an added band. The chipping off of a knob on the left side of the throne indicates that this is not an early state of the punch. The bottom band on the throne must have been repaired, possibly with an additional punch used on each individual die.

There were no die links among 11 coins of type 543 (10 from the hoard and another in the ANS collection). The number of coins was too small to allow an estimate of the original number of dies in the issue. Such an estimate is possible, however, for types 545 and 547.



<sup>&</sup>lt;sup>9</sup> On the development of technique in the earlier denarii see J. Hásková, "Die Böhmische Münztechnik in der Zeit des Feudalismus," *Arbeits- und Forschungsberichte zur Süchsischen Bodendenkmalpflege* 20–21 (1976), pp. 559-82.

TABLE 1

Type 545 Dies in ANS Hoard

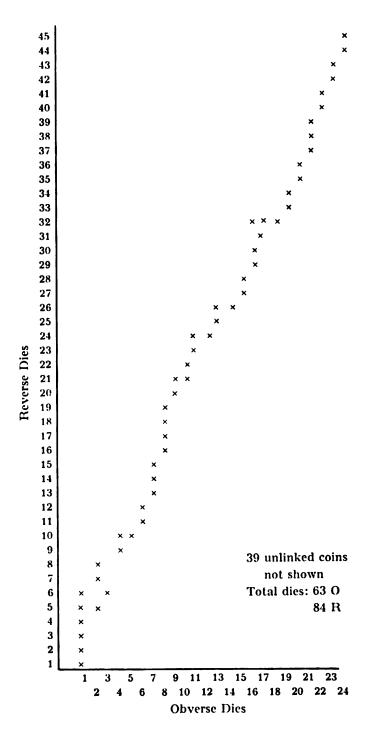
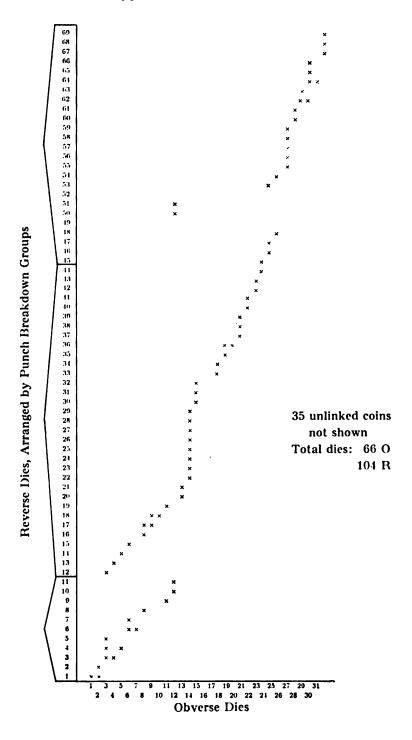




Table 2

Type 547 Dies in ANS Hoard



For type 545, out of 92 coins, there were 84 reverse and 63 obverse dies, and for type 547, out of 114 coins, there were 66 obverse and 104 reverse dies. Tables 1 and 2 show the die linkage within each of the types. There is hardly any reverse linkage. For each type there was only one pair with identical obverse and reverse dies.

A calculation of the number of original obverse dies of each type gives the results  $160 \pm 44$  for type 545 and  $129 \pm 26$  for type 547.10 The number of reverse dies is impossible to determine with any precision because the number of dies in the hoard is so large in relation to the number of coins that the standard deviation becomes ridiculously high. That there were  $694 \pm 402$  original reverse dies for type 545 and  $786 \pm 484$  for type 547 does not mean much. It is very likely, however, that there were at least three and probably four reverse dies per obverse, a figure which is much higher than the 2:1 ratio known from English mint records of the thirteenth and fourteenth centuries.

A rough estimate of the number of coins per type, and thus the number struck per year, requires a number of assumptions. Taking 140 original obverse dies per type, which falls within one standard deviation of the figures for both type 545 and type 547, and assuming a maximum of 30,000 coins per obverse die, which probably implies about 10,000 coins per reverse die, 12 the number of coins of each type



<sup>&</sup>lt;sup>10</sup> The margin of error given is two standard deviations. This calculation uses Giles Carter's formula which takes into account varying die life. For a number of coins (n) less than twice the number of dies found (d) the formula is D == (nd) / (1.211n-1.197d). The standard deviation is obtained by the formula  $\sigma = (D \sqrt{D}) / (n-1)$ . G. F. Carter, "A Simplified Method for Calculating the Original Number of Dies from Die Link Statistics," ANSMN 28 (1983), pp. 195–206.

<sup>11</sup> M. Mate, "Coin Dies under Edward I and II," NC 1969, p. 215, notes that in some instances the ratio of reverse to obverse dies in English mints was as high as three or four to one. B. H. I. H. Stewart, "Medieval Die-Output: Two Calculations for English Mints in the Fourteenth Century," NC 1963, pp. 97–106, notes that this was the case mostly for later and heavier coins, and that Anglo-Saxon coins probably had a 1:1 ratio. In keeping with the view that the ratio was lower in earlier centuries, a die study of coins of Boleslav II of Bohemia (967–999) showed a ratio of close to 3:2. Hásková (above, n. 9), p. 565.

<sup>&</sup>lt;sup>12</sup> English thirteenth- and fourteenth-century mint records show that about 30,000 coins per obverse die were produced, or 15,000 per reverse die. Mate (above, n. 11), p. 209, confirms this estimate by Stewart (above, n. 11) p. 102. See also

issued would be around 4,200,000.<sup>13</sup> If each type was issued in the same volume, the mint output would have averaged about 8,500,000 coins per year in the course of Vladislav's reign. The figure sounds high for the output of one mint in the twelfth century, even if it was producing coins for the whole country. This was not the case in England, where even with the coinage under firm royal control many mints operated, not to mention France and Germany with their hundreds of independent mints.

The figure of 30,000 coins per obverse die may be high for twelfth-century Bohemia. The method of sinking dies with one punch may have meant that the relief was relatively low, or that the die had to be made of a softer material which would wear out quickly. In addition, since the whole type was on one punch and it was fairly easy to make new dies, the Bohemian moneyers might not have been reluctant to discard a die with minor damage. At some English mints the output per obverse die was 23,000 or fewer coins, possibly because of inferior dies, and the correct figure for Bohemia may well be at or below this level.<sup>14</sup>

If 8,500,000 coins per year seems high, a lower number like five million would imply fewer than 18,000 coins per obverse die, perhaps

Stewart, "Second Thoughts on Medieval Die-Output," NC 1964, p. 293. In the former of these two articles Stewart suggests that from his figure of 15,000 coins per reverse die in 1300, a figure of 10,000 might be appropriate for earlier periods. J. D. Brand, "The Shrewsbury Mint, 1249 50," in R. A. G. Carson, ed., Mints, Dies and Currency: Essays Dedicated to the Memory of Albert Baldwin (London, 1971), p. 139, found an average of 46,500 coins per obverse die and 20,000 per reverse. These differences in estimates could reflect different qualities of dies or inaccuracy of records or of methodology.

<sup>13</sup> Each type may have constituted a separate issue, or, as was the case in Anglo-Saxon England, one issue may have included several types. R. H. M. Dolley and D. M. Metcalf, "The Reform of the English Coinage under Eadgar," in M. Dolley, ed., Anglo-Saxon Coins (Studies Presented to F. M. Stenton) (London, 1961), p. 168, n. 45.

14 Sellwood found experimentally, using medieval minting techniques, that 10,000 coins per pair of dies was a reasonable minimum, but he did not arrive at a maximum; D. Sellwood, "Medieval Minting Techniques," BNJ 31 (1962), p. 65. S. Suchodolski, "Z Badań nad Technika Bicia Monet w Polsce we wczesnym średniowieczu," Wiadomości Numizmatyczne 3 (1959-60), pp. 23-40, estimates three to five thousand coins per die, based on an analysis of dies from the fifteenth century.



6,000 per reverse. At Sellwood's 10,000 coins per obverse die, which is based on a 1:1 ratio between obverse and reverse dies, the annual output would be only 2,800,000, which might be reasonable if Vladislav was minting in the north at the same time Borivoj was minting at Prague. Amounts of coin and of silver mentioned by Cosmas could support an annual output anywhere in this range. For example, Svatopluk bribed the Emperor in 1107 with 10,000 marks of silver. 15 At 200 denarii to the mark,16 this would be two million coins, but these coins weigh far less than one two-hundredth of a mark of 210 g, and are probably not more than 50% silver (see below). It probably took over 600 of Vladislav I's type 545 or 547 denarii to make up 200 g of Radoměrský estimates that in Svatopluk's denarii the 10,000 marks were equivalent to four million denarii.<sup>17</sup> This would be a huge figure in relation to a year's mint output, if Svatopluk struck coins in the same volume as Vladislav. Svatopluk did not have that much in coin: "Qui cum venisset Pragam, continuo sacra spoliat delubra, ornamenta contrahit muliebria et, quicquid micabit auri et argenti in Boemia, corrasit et vix collegit VII marcarum milia; de cetero fratrem suum Ottonem dat regi obsidem."18 Cosmas could be exaggerating the size of the payment, as medieval sources often do.19

At the higher estimate of 8,500,000 coins a year, assuming 250 tenhour working days a year (probably a high figure), the mint would have to produce just under 60 coins a minute. At 12 coins a minute per anvil,<sup>20</sup> the mint would have five anvils operating at once.

The very low number of die pairs in the hoard indicates that the obverse and reverse dies were not wedded to each other. The reverse



<sup>&</sup>lt;sup>15</sup> Cosmas, 3, 21, p. 187.

<sup>16</sup> Radoměrský (above, n. 8), p. 64, supports this figure, based on Cosmas, 2, 8,
p. 94: "marcam nostre monete CC nummos dicimus."

<sup>17</sup> Radoměrský (above, n. 8), p. 70.

<sup>&</sup>lt;sup>18</sup> "He, when he came to Prague, immediately despoiled the sacred shrines, assembled women's ornaments, and scraped together whatever gold or silver glittered in Bohemia, and soon collected seven thousand marks; for the rest he gave the king his brother Otto as surety." Cosmas, 3, 21, pp. 187-88.

<sup>&</sup>lt;sup>19</sup> For a discussion of monetary terminology in the sources see I. Pánek and Č. Hladík, "Denar a Hřivna v Českých Pramenech do Roku 1222," *Num Sborník* 10 (1968), pp. 79-109.

<sup>20</sup> Estimate for a team of three men from Sellwood (above, n. 14), p. 64.

dies would have been kept in a central storage area and chosen at random to pair with an obverse die on each workday. The chance of a reverse being paired with a particular obverse for more than one day would not be high. This mint organization contrasts with that which Cach found in a study of denarii of Boleslav I (924-67).<sup>21</sup> He concluded that obverse and reverse dies were wedded to each other: in each of his identical pairs the two coins had the same die axis, indicating that the dies were hinged or otherwise attached. In neither of the two die pairs in the ANS hoard were the die axes the same.

The random pairing each day of obverse and reverse dies may explain the low number of die pairs but it does not explain the low number of reverse die links. This low number may be a reason to lower the number of coins produced per die. Each anvil would produce 6,800 coins a day, and at the higher estimate of 30,000 coins per obverse die, an obverse die would have lasted an average of about four and a half days. A reverse die would have lasted between one and two days. If each obverse die produced, on the average, 20,000 or fewer coins, then it would last on the average about three days, and the reverse would probably last a day or less. A lifetime of a day for most reverses would help explain why no reverse in the ANS hoard is found with more than two different obverses and most are found with only one.

When a die became unusable it had to be replaced; this raises the question of whether the dies for an issue were sunk all at once and chosen at random as needed, or whether the new dies were sunk only when necessary. The die linkage chart for type 547 (Table 2) answers the question: where one obverse was used with different reverses those reverses are always, with one exception (obverse die 12), from the same punch state or consecutive punch states. This implies that the dies were being sunk only when needed, and a given obverse die was used with reverses made at about the same time (perhaps on consecutive days). Unfortunately, the state of preservation of the coins does not permit a chronological ordering of the coins from a given obverse die which could then be correlated with progressive punch breakdown on the reverse.



<sup>&</sup>lt;sup>21</sup> F. Cach, "Přispěvek k technice ražby český denárú," Num Sborník 1 (1953), pp. 44-51.

#### CHRONOLOGY AND METROLOGY

Eduard Fiala developed the first standard chronological system for Bohemian denarii, based on hoard evidence and on stylistic criteria and fabric. For the coinage of Vladislav I he noted that his chronology could be only tentative. He placed types 543, 545 and 547 (his XV:17, XI:18 and XV:15 respectively) all in the period when Vladislav was co-ruler with Bořivoj.<sup>22</sup> Cach's more recent chronology numbered all the Bohemian pennies consecutively from reign to reign. He used the results of more recent scholarship to revise Fiala in several instances, the coins of Vladislav I being one such instance. He took the chronology for these coins from Radoměrský, who based his chronology mostly on metrology. Cach, following Radoměrský, places types 543 and 545 in the earlier part of Vladislav's reign, before 1118. Type 547 becomes the second issue of the period 1118–20.<sup>23</sup> Before an examination of Radoměrský's reordering of the types, the hoard evidence merits a brief discussion.

Fiala's chronology was based on hoard evidence too skimpy to be conclusive. Not enough hoards have been discovered since Fiala's time to allow a conclusive chronology based on hoards even today. Many of the hoards containing coins of Vladislav I also contain coins of both previous and subsequent rulers. While it is not useful to attempt here to reorder all the types of Vladislav I, the ANS hoard may help fix the chronological position of the three types represented in it.<sup>24</sup>

Five hoards besides the ANS hoard contained coins of one or more of these three types, or coins usually considered to fall between these types. One hoard was found in Prague in 1885, at Dolní Mokropsy.<sup>25</sup> It consisted of about 660 coins, all of Vladislav I, of types 543, 544 and 545 (Table 3). This hoard of only three types may have been an im-



<sup>&</sup>lt;sup>22</sup> Fiala, 1, p. 353.

<sup>23</sup> Cach (above, n. 1), p. 39.

<sup>&</sup>lt;sup>24</sup> The hoards are listed in both Cach's and Fiala's compilations as well as in E. Nohejlová-Prátová, ed., Nálezy Minci v Čechách, Na Moravě a ve Slezsku (Prague, 1956); hereafter cited as Nálezy. The hoards will be identified here by the numbers given them in these three reference works.

<sup>&</sup>lt;sup>25</sup> This was the third find at the site, so the hoard is known as Dolní Mokropsy III. Fiala 116, Cach 200, Nálezy 1555.

TABLE 3
Hoards Containing Coins of Types 541–547

					,	< = P	resent
	Earlier types		×		×	×	×
Coin Type	511	2	9				
	542		6				2
	543	10 +	7	400			327
	544		6	60		1	2
	515	92 +		200	1		57
	546					1	16
	547	111+			1		59
	Bořivoj II				×		×
	1118-1120						
	Later types		× *		×	×	×
	(from 548 on)						
				-		-	
				Dolní Mokropsy III (Prague)			
		Į.		okro rag	ల		
		A.NS Hoard		ž Ė	Hodousice	<b>ဥ</b>	
		S.	lav	'n II	Jon	olic	ice
		7.	Čáslav	) o l	<b>-</b> 10	Netolice	Senice
		~	-	-	_	7.	<i>3.</i>

<sup>&</sup>lt;sup>a</sup> The Caslav hoard contains three coins of type 420, dated by Radoměrský and Cach as Bořivoj's first issue of 1118 20, and one of type 558, thought by them and Fiala to be a late type of Vladislav I from 1120 25.

portant factor in Fiala's placing them consecutively (15:17, 15:19 and 15:18 respectively). The same logic would require that 543, 545 and 547 be consecutive, based on the ANS hoard.

The hoard at Čáslav, discovered in 1878, consisted of about 300 coins, going back as far as Břetislav II and concluding with Vladislav I.<sup>26</sup> Most of the coins of Vladislav in this hoard were early issues (Table 3). None of the coins of Bořivoj II from Caslav were of types usually attributed to his later period (1118–20), so the hoard could have been deposited before 1118, as Radoměrský suggests,<sup>27</sup> except that there was

<sup>&</sup>lt;sup>27</sup> Radoměrský (above, n. 8), p. 102.



<sup>&</sup>lt;sup>26</sup> Fiala 114, Cach 191, Nálezy 1554.

one coin of type 558, which Cach and Radoměrský place at the end of Vladislav's reign. Either this type is misplaced in the chronology or there was a long gap between the time most of the coins were assembled and the time of deposition.

The hoard from Senice, discovered in 1887, contained about a thousand pennies, including coins from both periods of Bořivoj II's reign. This hoard contained the three types found in the ANS hoard, as well as the types which fall between them in Cach's classification (Table 3). The five types found in the greatest number in this hoard are the last two types of Bořivoj II's reign and the three types of the ANS hoard. These abundant types may close the hoard, which would imply that types 543, 545 and 547 are consecutive chronologically, that type 548 is prior to them, and that these three types come from the years around 1120.

The find from Netolice, discovered in 1850,29 is the only known hoard besides Senice which contained type 546. It consisted of 154 Bohemian pennies, starting with two of the earlier period of Bořivoj and continuing through the reign of Vladislav I's successor Sobeslav I. In this hoard there are no coins at all of types 543, 545 or 547, though the hoard does contain types 544 and 546, considered by Cach to fall between the ANS types.

The hoard from Hodousice came to light in 1931, too late to be taken into account in Fiala's chronology. This hoard of 564 coins, including some German ones, began as early as Vratislav II. The latest coins are of Vladislav I. Types 545 and 547 are represented by one specimen each. Only one other type, 550, is present. Type 550 is considered to be a later type, but since the latest types of Bořivoj II are represented in the hoard, the date of deposition was probably after 1120 and the presence of 550 does not create a problem.

Two conclusions may be drawn from the evidence of hoards containing types 543, 545 and 547, and hoards that might have been expected to contain them if Cach's chronology were correct. First, nothing in the



<sup>&</sup>lt;sup>28</sup> Fiala 111, Cach 305, Nálezy 1556; E. Fiala, "Senitzer Münzfund," NZ 1887, pp. 225-34.

<sup>&</sup>lt;sup>29</sup> Fiala 123, Cach 211, Nálezy 1581.

<sup>&</sup>lt;sup>30</sup> Cach 208, Nálezy 1581. This is the hoard that Radoměrský analyzed (above, n. 8).

Finds of Coins of Types 541-547 in the Territory of Modern Czechoslovakia TABLE 4 Čáslav
 Dolní Mokropsy III (Prague)
 Hodousice
 Netolice
 Senice

hoard evidence indicates a break in Vladislav's rule after type 545, where Cach, following Radoměrský, puts it. Type 545 is found only once in a hoard without 547 while 547 is never found without 545.

The more important conclusion is that there seems to be a geographical pattern in the distribution of types (see Table 4). The sites of Hodousice and Netolice, in the southwest corner of Bohemia, contain one example or no examples of types 543, 545 and 547. Čáslav, just south of the Elbe, has seven of type 543 pieces but lacks the other two. The two known sites with appreciable numbers of types 543, 545 or 547 are Senice, north of the Elbe, and Dolní Mokropsy at Prague. This pattern suggests that these types were struck by Vladislav I between 1118 and 1120, when he was ruling in the north. His coins would have circulated concurrently with contemporary issues of Bořivoj II, as the Senice hoard indicates. The hoard at Dolní Mokropsy, which contains only coins of Vladislav I, may well be the remains of a lump sum payment sent by him to Bořivoj or someone else at Prague. The pattern suggests that the ANS hoard probably came from north of the Elbe and the types in it may be dated between 1118 and 1120.

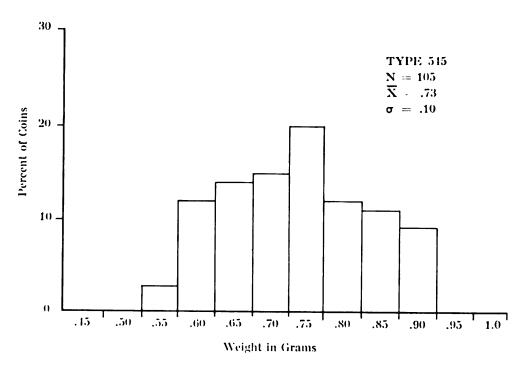
This theory does not explain why there are so many coins of type 544 at Dolni Mokropsy. Type 544 could also have been struck in the north between 1118 and 1120, but it is represented only by two examples at Senice. A proposed chronology which fits the hoard evidence at least as well as the generally accepted scheme would place type 546 as the last type of Vladislav I's first period of rule, and then 544, 543, 545 and 547 as his issues in the north.

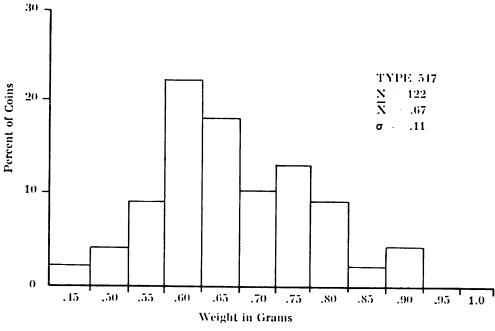
The hoard evidence is not the only evidence for the chronology of Vladislav I's types. Radoměrský bases his chronology largely on metrological evidence. Like Fiala, he mentions stylistic as well as metrological criteria for placing certain types in the period 1118–20. Fiala had placed types XV:10 and XV:15–18 (550, 547, 546, 543 and 545) in that period, 31 but Radoměrský places types 546–550 in that period. Radoměrský agrees that type 546 (Fiala's XV:16) resembles the preceding types 543–45 in size of flan, but he finds it so different in fineness that it must be the beginning of a new period of coinage. Types 547 and 548 follow in a fineness progression from type 546; he also



<sup>31</sup> Fiala, p. 353.

TABLE 5
Weights of Coins of Types 545 and 547





mentions that they are of the same diameter as Bořivoj's types 420–22 and type 547 particularly resembles Bořivoj's type 420 iconographically.<sup>32</sup> Radoměrský also cites an increase in weight after type 545, corresponding to the increase in fineness.<sup>33</sup>

Table 5 shows the frequency table of weights for types 545 and 547. Included in the table are not only the coins from the ANS hoard but also 13 coins of type 545 and eight of type 547 whose weights are given by Radoměrský. The frequency table for type 543, not shown here, is almost identical to that for type 545. The tables show that type 545 is significantly heavier than type 547. This analysis, based on a much larger sample than that used by Radoměrský, shows that his mean weights for these types, and therefore the claim of an increase in weight after type 545, are wrong.

Radoměrský's fineness figures are also suspect. For some of the types, his fineness figures came from a destructive chemical analysis which is extremely accurate for the individual coin; it seems, however, from Radoměrský's article that only one coin of each type was analyzed. For other types, his figures come from the use of a touchstone.35 For the types in question, his fineness figures are: 543, .613 (chemical analysis); 544, .660 (touchstone); 545, .288 (chemical analysis); 546, .785 (touchstone); 547. .740 (touchstone); 548, .640 (touchstone). Radoměrský's claim of a sharp increase in silver content with type 546 and a gradual decline thereafter is based solely on the evidence of the touchstone, which has been shown by comparison with whole-coin neutron activation analysis to provide figures for silver content that are often much too high.36

In an attempt to test Radoměrský's figures for the fineness of these coins, streaks from ten coins each of types 545 and 547 were analyzed both by neutron activation, by Professor Gordon Goles of the



<sup>32</sup> Radoměrský (above, n. 8), pp. 102-3.

<sup>33</sup> Radoměrský (above, n. 8).

<sup>34</sup> Radoměrský, p. 134.

<sup>35</sup> Radoměrský, p. 55, n. 117.

<sup>&</sup>lt;sup>36</sup> Some examples of such results are provided in K. Skaare and E. Steinnes, "Mynter i Atomreaktoren: Aktiveringsanalyse av Norske Middelaldermynter," Nordisk Numismatisk Unions Medlemsblad (1966), pp. 81-87, and K. Skaare, Coins and Coinage in Viking-Age Norway (Oslo, 1976), pp. 80-81.

Department of Geology of the University of Oregon, and microchemically, by Richard Mauterer for the Numismatic Institute in Vienna,<sup>37</sup> Both sets of results disagree with Radoměrský's findings. His figure from the chemical analysis of type 545 was 28.8% silver, from the touchstone analysis of type 547, 70.0% silver. According to the neutron activation analysis, type 545 averages 70% silver, while type 547 averages 55%. The difference is statistically significant, with a 5% chance that it arose by random variation. According to the microchemical analysis, type 545 averages 60% and type 547 58%, which is not a statistically significant difference. The silver contents are actually somewhat lower in the coins than those reported, owing to surface enrichment, but this systematic error should not affect one set of results more than the other, nor is there any apparent reason why it should affect one type more than the other. Table 6 shows the finenesses for each type by each method and Table 7 gives the fineness figures for individual coins analyzed by the two methods.38

Six of the coins were analyzed using a whole-coin neutron activation analysis method by Professor Peter Gaspar of Washington University.<sup>39</sup> The results do not agree closely with either the neutron activation analysis of streaks or the microchemical analysis of streaks. The results are shown in Table 7, along with the results for the same coins from the

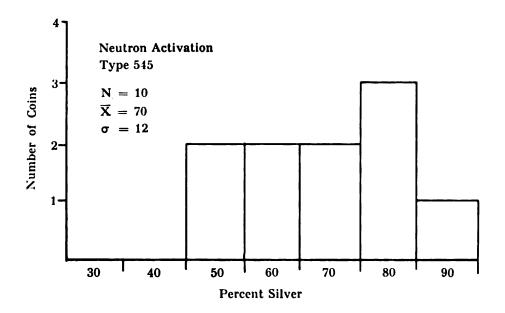


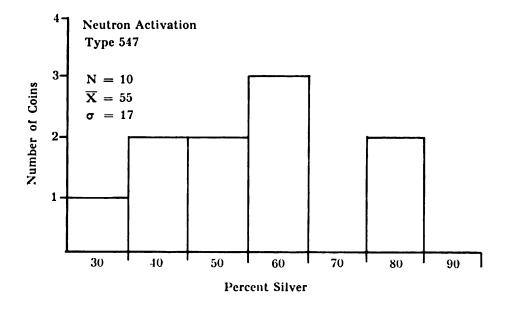
<sup>&</sup>lt;sup>37</sup> Goles followed the procedure developed by Gordus and described in A. A. Gordus, "Neutron Activation Analysis of Coins and Coin-Streaks," in E. T. Hall and D. M. Metcalf, eds., Methods of Chemical and Metallurgical Investigation of Ancient Coinage (London, 1972), pp. 132-34. The streaks were made by the author. Mauterer's method is described in R. Mauterer and H. Ballczo, "Zerstörungsfreie Analyse. Neue Wege bei der Bestimmung alter Münzen," MÖNG 20 (1977), pp. 46-47, and "Zerstörungsfreie Ultramikroanalyse archäologischer Fundstücke," Fresenius Zeitschr. Anal. Chem. 295 (1979), pp. 36-44; 298 (1979), pp. 269-72; and 299 (1979), pp. 46-48. The streaks were made by Wolfgang Hahn. In both cases only one streak was taken from each coin. I am very grateful to Goles, Hahn and Mauterer for these analyses.

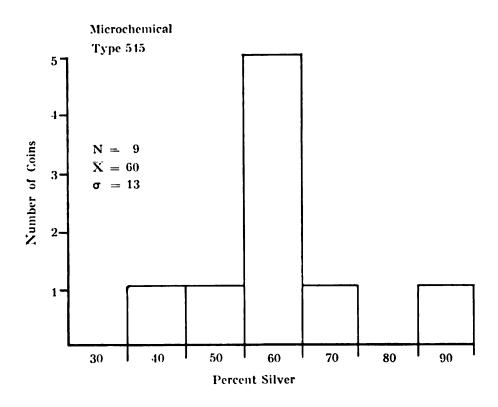
<sup>38</sup> The percentage of silver from the microchemical analysis is adjusted to account for the lead content, which does not show up in the neutron activation analysis.

<sup>&</sup>lt;sup>39</sup> This method will be described in an article by Gaspar and Stahl in the forth-coming Proceedings of the Royal Numismatic Society / British Museum Symposium on Scientific Techniques in Numismatics A.D. 500 1500, Metallurgy in Numismatics, vol. 2.

TABLE 6
Silver Content by Neutron Activation and Microchemical Analysis







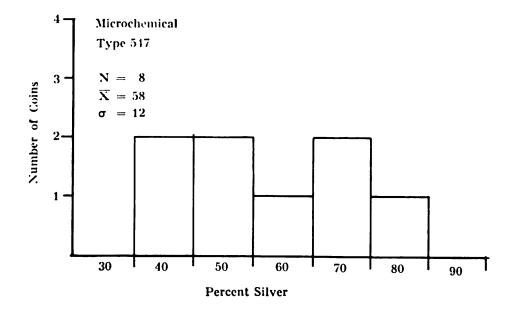


Table 7

Analysis of Streaks

	Neutron Activation: Silver Content in Percent	Microchemical: Silver Content in Percent	Whole-Coin Neutron Activation: Silver Content in Percent
<i>Type 545</i>			
1	70	**	
2	78	58.4	46.6
3	86	86.5	
4	77	61.6	
5	73	69.6	46.2
6	49	46.8	
7	64	61.8	
8	54	35.3	37.8
9	82	61.4	
10	62	58.9	
<i>Type 547</i>			
11	32	52.8	30.6
12	63	44.3	
13	81	75.0	
14	50	45.0	
15	37	44.2	
16	56	64.9	50.4
17	38	**	
18	81	75.1	
19	61	66.5	49.7
20	50	**	

<sup>\*\*</sup> Not available.



other two methods. The mean for both Type 545 and Type 547 from the whole-coin neutron activation data is 43.5% silver, but the sample is so small and the standard deviation is so high (5 for type 545, 11 for type 547) that the similarity is only coincidental. These data indicate that neither streak method may be very accurate for the whole coin, possibly because the degree of error due to surface enrichment varies from point to point on the coin, and, more importantly, that there is a very high degree of variation between individual coins of the same type. Once again, however, the sample is too small to permit firm conclusions. Table 8 plots the results from one of the two streak methods against the other. The center line shows where the points would fall if the measurements by the two methods were exactly the same: the two dotted lines represent the range allowed by two standard deviations according to the neutron activation method. This graph shows that for most of the coins the two measurements fall within two standard deviations of each other and also suggests that some of the discrepancy may be systematic, perhaps a function of calibration: the microchemical method seems to provide results consistently somewhat lower than the neutron activation method. The coefficient of correlation between the two sets of results is .73.

Because of the great variation not only between the two methods of analysis but also among coins of the same type as measured by either analysis, these figures cannot be accepted as entirely conclusive. The differences between the two methods are relatively small in relation to the standard deviation; for type 545, where the mean as measured by the two methods differs by ten percentage points, there is about a 15% chance that the difference is random. It is clear, however, that if there is a difference between the two types, it is small, and it is in favor of a greater fineness for type 545. It is out of the question that the average fineness of type 545 is 29% and type 547 70%, as Radoměrský's figures imply.<sup>41</sup> The basis of Radoměrský's chronology is thus metrolo-

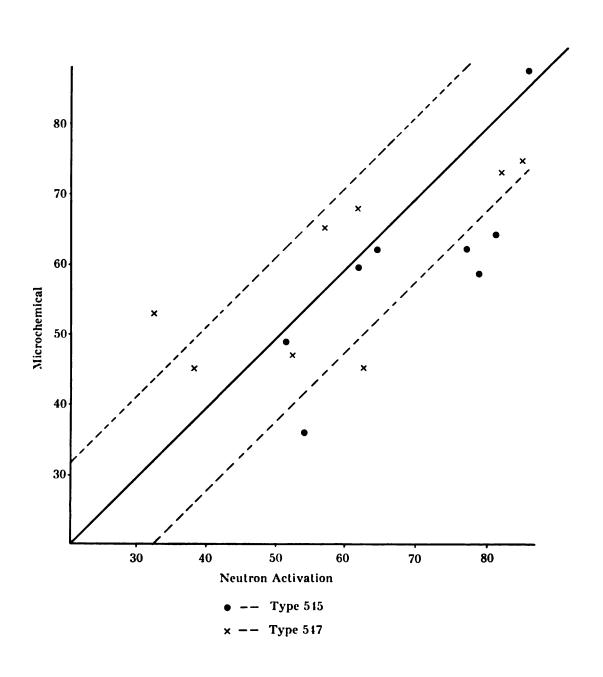


<sup>40</sup> Mauterer did not calculate a standard deviation for the microchemical method.

<sup>41</sup> One reason for the discrepancies between the values for the same coin by the two methods or for different coins of the same type by the same method could be a question of sampling error, not necessarily human error during sample taking but simply the fact that the degree of surface enrichment due to corrosion might vary from coin to coin or from place to place on a given coin. There could, however, be real differences in silver content between individual coins of the same type because,

TABLE 8

Comparison of Silver Content in Percent of Individual Coins in the ANS Hoard as Determined by Microchemical and Neutron Activation Analyses



gically unsound, although to ascertain whether or not there was a gradual debasement of the coinage or to create a new metrological chronology for the coinage of Vladislav I would require the analysis not only of a larger sample of coins of these types but also of the other types on which Radoměrský bases his sequence.

The analyses of these coins were also designed to reveal trace elements that might indicate the silver source. There is no documentary or archaeological evidence for the operation of mines in Bohemia in the twelfth century, but mines could have been operating then, or the silver for these coins could have come from melting down other silver. According to the neutron activation analysis, the gold content of these coins as a percentage of the silver content averages .29% ( $\sigma = .078$ ).42 This is much higher than the levels a student in Gordus's lab found for sixteenth- and seventeenth-century coins struck at Joachimsthal, where the gold content was less than .1% of the silver content.43 This difference suggests that Vladislav's coins were not struck from silver mined in the Joachimsthal area. Unfortunately trace element figures are not available for coins known to have been minted on the spot at mines known to have been active in the medieval period.

Not only Radoměrský's chronology of types and his distinction between periods of Vladislav's reign depend on his metrological data. His theory of Vladislav I's monetary policy relies on a progressive debasement of the coinage up to type 545, then a repetition of the process beginning with type 546. Each time the coins were called in

while the moneyer may have been able to control the overall amount of silver in the alloy, at an overall silver content in the neighborhood of 50% he may not have been able to keep it uniformly mixed in the crucible. If the content varies from coin to coin it could also vary within each coin. Since the streaks are taken from a tiny point on the edge of the coin, two streaks taken from two different points on the coin could well produce different results. More analytical work is clearly needed to determine whether the variation is real or due to sampling error. It will not be possible to analyze a larger sample of coins from this hoard, as the bulk of the hoard is no longer in the possession of the ANS.

- $^{42}$  The microchemical analysis, however, found no gold content over .01% of the alloy.
- <sup>43</sup> S. F. Foley, "International Silver Flows of the Early Modern Period: A Study of Trace Metal Content of Silver Coins," unpubl. honors thesis (University of Michigan, 1980), p. 13. Three coins from Joachimsthal were analyzed.



for a renovatio monetae, the duke made a greater profit. Without Radomerský's metrological data, his theory of renovatio lacks evidence. However, it is still a plausible hypothesis and, as it has been accepted by most Czech scholars, it is worth examining at greater length.

Periodic renovatio monetae was well known in medieval Europe. The classic example is the Anglo-Saxon coinage of Edgar (959–75) and his successors, where the old coin was recalled and new types issued at regular intervals of three or six years. 44 Various German minting authorities in the thirteenth century practiced the same technique, issuing new coins for each annual market, demonetizing the old coin and mandating the use of the new. 45 Radoměrský, using his fineness statistics, concluded that a similar process went on in Bohemia: the ruler periodically called in the coinage and issued a more debased version. Other Czech scholars have generally followed Radoměrský's views on this point and emphasized the vast profits the dukes drew from the renovatio as another example of feudal exploitation. 46

The major differences between the supposed renovatio monetae in Bohemia and those known from elsewhere in Europe are the frequency of type changes and the patterns of distribution of types in hoards. Vladislav ruled for 15 1/2 years and issued 29 types—roughly, but not exactly, two per year. The coins could have been issued for a biannual market, with the sequence of two types per year disturbed by Vladislav's interval of rule in the north. Even by Radoměrský's chronology, though, there are only thirteen types in the years 1110–18, and even fewer if types 543-45 are placed in the period 1118–20 as suggested here. There cannot have been a regular biannual renovatio.

No documentary evidence suggests a recall of the old coinage and forced circulation of the new, or specifies payment in a certain type of



<sup>&</sup>lt;sup>44</sup> M. Dolley, "The Coins," in D. M. Wilson, ed., *The Archaeology of Anglo-Saxon England* (Cambridge, 1976), p. 358.

<sup>&</sup>lt;sup>45</sup> For example: W. Hess, "Währungszwang und Geldumlauf in den Brakteatengebieten Wetterau-Hessen-Thuringen," in T. Hackens and R. Weiller, eds., Actes du gème Congrès International de Numismatique (Louvain-la-neuve, 1982), vol. 1, pp. 853-57.

<sup>46</sup> Works accepting Radomersky's conclusions as given include Hásková (above, n. 4); J. Pošvář, Měna v. Čechách, na Moravě a ve Slezku (Prague, 1977); J. Sejbal, Dějiny Peněz na Moravě (Blok, 1979); R. Turek, "K úloze české mince v období denárovém," Num Listy 34 (1979), pp. 150-62.

coin.47 The distribution of types in hoards, too, makes the demonetization of old types and forced circulation of a debased coinage extremely unlikely. In the instance of tenth- and eleventh-century England, where a regular renovatio did take place, two-thirds of the known hoards were consistent with a total recoinage: 15 of 33 hoards from territory under royal control were "composed substantially of coins of a single issue," and seven more of no more than two issues. 48 The Bohemian hoards extend over a much greater length of time and number of types. 49 Pošvář has argued that hoards contain so many types because many coins were not brought in for reminting by the people, who preferred to resist this exploitation by keeping and concealing the coins of higher value.<sup>50</sup> Hoards of many types so far outnumber the hoards of one or two types that it appears that older coins, even those of previous reigns, circulated along with newer types. The contradiction Pošvář attempts to explain—forced recoinage and hoards with many types—may be better resolved by not assuming forced recoinage without any evidence.

One Bohemian source, the chronicle of Cosmas of Prague, mentions renovatio monetae, but not in a twelfth-century context. Cosmas describes Boleslav II, on his deathbed in 999, giving advice to his sons. Boleslav quotes a supposed speech of Charlemagne to his son Pippin: "Certe nulla clades, nulla pestilentia nec mortalitas nec non, si hostes totam terram rapinis, incendiis devastarent, magis populo Dei nocerent, quam frequens mutacio et fraudulenta peioratio nummi," and he refers to "non duces, sed fures, non rectores populi Dei, sed nequam exactores, avarissimi sine misericordia homines, Deum omnia cernentem non timentes, qui ter vel quater in anno monetam mutando erunt in lacqueum diaboli ad perdicionem populi Dei." Why Cosmas included this



<sup>&</sup>lt;sup>47</sup> See the exhaustive survey of the documentary evidence by Pánck and Hladík (above, n. 19).

<sup>48</sup> Dolley and Metcalf (above, n. 13), p. 156.

<sup>&</sup>lt;sup>49</sup> See tables of hoards in J. Pošvář, "Nálezy Mincí a Renovatio Monetae," Num Sborník 3 (1955), pp. 153 55.

<sup>&</sup>lt;sup>50</sup> Pošvář (above, n. 49), p. 152.

<sup>&</sup>lt;sup>51</sup> "Indeed no disaster, no plague, no death, not even if enemies ravaged the whole land with fire and pillage, is more harmful to the people of God than a frequent altering and fraudulent worsening of coinage ... not leaders but thieves, not guides to the people of God but tax-collectors, the most greedy of men, without mercy, not fearing God who sees all, who by altering the coinage three or four times

passage is not clear. No scholar has argued that such renovatio was going on in the time of Boleslav, though perhaps no one has considered the possibility that Boleslav borrowed the idea of recoinage, as he did certain coin types, from Anglo-Saxon England. Probably Cosmas was not following an authentic tradition when he put these words in Boleslav's mouth. Nor is this a likely speech for Charlemagne to have made to his son. Before Charlemagne's monetary reforms, coinage was certainly debased, but not three or four times a year. The scene may be an oblique criticism of conditions in Cosmas's own time, during the reign of Vladislav I, but this possibility can be no more than a conjecture.

The undeniable fact remains that Vladislav did issue 29 different types of pennies during his reign, and if any of the chronologies—those of Fiala, Radoměrský, Cach, and this paper—is right, so many of those types come from the later part of his reign that he must have altered the coinage three or four times a year. This does not, however, necessarily mean that silver content was altered each time. The change could be merely artistic.

One possible explanation lies in the technique used in making the coins. This paper has already dealt with the breakdown of the punch used in making reverse dies for type 547. It is possible that a given coin type was minted as long as new dies for it could be made. Once one of the two punches broke, the artisans would design a new type rather than merely replacing the old punch. Sometimes the switch to a new type might be accompanied by a change in the weight (as happened with type 547) or silver content. These changes, however, need not have occurred every time the type changed. The type did not change at regular intervals, the new type was not forced upon the populace, and it may be that the reason for the change was technical rather than fiscal.

The manner in which the coins circulated certainly bears on the question of *renovatio*, but it is not at all certain whether the coins circulated by weight or by number.<sup>52</sup> Cosmas refers to amounts of money



a year will fall into the snares of the Devil, to the perdition of the people of God." Cosmas, 1, 33, p. 59.

<sup>&</sup>lt;sup>52</sup> A charter of Bořivoj II, dated 1101, sets out market tolls to be paid in denarii, but unfortunately this is a forgery probably dating from the fourteenth century: *Codex* 1, pp. 392-93, no. 389.

by numbers of marks in some cases, by numbers of coins in others, never specifying what kind of coins.53 Cosmas's references to denarii or nummi make it likely that the coins did circulate by number. This implies either a high level of trust in the coinage or else a strong ducal power backing the fiat. Czech scholars have tended to favor the latter theory, suggesting that the use of the coinage was imposed upon the subject classes by the feudal nobility, who themselves used bullion for their transactions.54 Pánek and Hladík come to the conclusion that coins seem to have been used within Bohemia, while statements about payments made abroad are usually expressed in marks and probably refer to bullion.<sup>55</sup> This could be merely a question of denomination: payments abroad tended to be in large amounts and might be expressed in a different money of account, though paid in coin. Still, there is no evidence for payments abroad in coin in the early twelfth century. If the Empire imported silver from Bohemia, in return for salt, wine, spices and cloth,56 the silver provided need not have been in the form of coins. Bohemian coins of the tenth and eleventh centuries are found



<sup>53</sup> For example, 1, 38, p. 70, "marsupium centum marcis plenum," ("a pouch containing a hundred marks"); 1, 42, p. 78, "decem milia nummorum," ("ten thousand coins"); 2, 4, p. 87, "in fiscum ducis unusquisque CCC nummos componat," ("let each pay three hundred coins to the ducal treasury"); 2, 12, p. 100, "mille et quingentas marcas denariorum," ("fifteen hundred marks in coin"); 2, 21, p. 113, "centum marcas argenti," ("a hundred marks of silver"); 2, 25, p. 119, "IIII denarios ad septimanum pro carne sine intermissione haberet," ("Let [each] have four pence a week for meat, without interruption"); 2, 42, p. 118, "Trina dari fecit nummismata denariorum," ("he caused three penny coins [?] to be given"); 3, 1, p. 162, "mille marce argenti et LX auri," ("a thousand marks of silver and sixty of gold," and the gold obviously was not in coin form); 3, 20, p. 185, "immensa auri et argenti pondera," ("enormous weights of gold and silver," compare Deut. 17:17).

<sup>&</sup>lt;sup>54</sup> P. Radoměrsky, "Románská Praha ve Světle Nálezů Mincí," Časopis Národního Musea 124:1 (1955), p. 34; K. Peukert, "Numismatický příspěvek k dějinám osídlení severovýchodnich Čech," Num Listy 25 (1970), p. 169.

<sup>&</sup>lt;sup>55</sup> The chart in Pánek and Hladík (above, n. 19), p. 96, shows that most of the documents on which they base this conclusion date from the late twelfth or thirteenth century.

<sup>56</sup> K. Bosl, "Die staufische Reichspolitik im oberpfälzischen, fränkischen und böhmischen Raum," in Böhmen und seine Nachbarn. Gesellschaft, Politik und Kultur in Mitteleuropa (Munich, 1976), p. 141; his evidence comes from the late twelfth and thirteenth centuries.

in Germany and Poland,<sup>57</sup> but very few from the twelfth century.<sup>58</sup> Many coins might have left Bohemia proper but have been catalogued as domestic finds if they were buried in Moravia or Slovakia, but this cannot be called long-distance trade. The dropoff in the flow of coins to Poland and Germany is significant, and may mean a great decline in the importance of trade routes running through Bohemia.<sup>59</sup>

If Bohemian coins were not struck for payments abroad, their main use must have been in local or regional markets. It is hard to see how coins in the quantities suggested by the die study could all have been used in regional commerce if they were not used for payments at the political level. An Arabic description of the market of Prague in the middle of the tenth century by the Jew Ibrāhīm ibn Yaʻqūb notes that silver coins were of such high value that pieces of cloth had to be used as currency in many transactions, though this was a major international market:

The city of Prague is built of stone and chalk and is the richest in trade of all these lands. The Russians and the Slavs bring goods there from Cracow; Muslims, Jews and Turks from the land of the Turks also bring goods and market weights; and they carry away slaves, tin, and various kinds of fur. Their country is the best of all those of the Northern peoples, and the richest in provender. For one penny, enough flour is sold there to suffice a man for a month, and for the same sum enough barley to fodder a riding animal for forty nights; ten hens are sold there for one penny.



<sup>&</sup>lt;sup>57</sup> K. Bosl, "Wirtschaftlich-politische Beziehungen der Residenz- und Fernhandelsstadt Regensburg zum Slawischen Osten," Böhmen und seine Nachbarn, p. 159; E. Nohejlová-Prátová, "Kilka uwag na temat najstarszych znalezisk denarow czeskich współczesnych znalezisk polskich," Wiadomości Numizmatyczne 6 (1962), p. 133-62.

<sup>&</sup>lt;sup>58</sup> In fact only one hoard outside Czechoslovakiø containing coins of Vladislav I was known to Cach as of 1972. This hoard, at Głogów in Poland, contained a small number of type 555 (Cach 348).

<sup>&</sup>lt;sup>59</sup> G. Skalský, "Český Obchod 10. a 11. Stolet: ve Světle Nálezů Mincí," Num Sborník 1 (1953), pp. 13-43.

<sup>60</sup> T. Lalik, "La circulation des métaux précieux en Pologne du xe au xite siècle," Acta Poloniae Historica 18 (1968), p. 139, makes the useful distinction between three zones of circulation: local, commercial and political.

In the city of Prague they make saddles, bridles, and the flimsy leather bucklers that are used in those parts. And in the land of Bohemia they make light, fine kerchiefs like nets, embroidered with crescents which are no use for anything. Their price there at all times is ten kerchiefs for a penny. With these they trade and deal with one another and they possess vases of them. They regard them as money, and the most costly things are bought with them, wheat, slaves, horses, gold, silver and all things.<sup>61</sup>

This description is 150 years earlier than Vladislav's reign. There is simply no information about the use of non-metallic media of exchange in twelfth-century Bohemia, nor about the buying power of a denarius. The buying power of silver or of a coin which now contained less silver could have declined by the twelfth century to the point where it could circulate on the local and commercial levels. Again, no documents refer to Prague as an international market in the twelfth century. It was important both earlier and later, 62 but the assumption that it served the same functions in the twelfth century remains unproven.

Ultimately the coins themselves remain the sole evidence for the monetary history of the period. Even the coins do not tell a conclusive story. Study of the ANS hoard has shown that the coins were struck in substantial numbers, even at the lowest of the several estimates presented here, but it cannot show the uses to which they were put. The hoard has called into serious question the metrological data on which the accepted chronology and the theory of decremental debasement are based. Removing the evidence for a theory does not disprove the theory, but without a solid metrological or documentary foundation the idea of a periodic renovatio with forced acceptance of the new coinage founders on the fact that so many hoards contain such a wide variety of types.



<sup>61</sup> A. A. el-Hajji, ed., Jughrāfiya al-Andalus wa-Urūba (Beirut, 1968), trans. in B. Lewis, The Muslim Discovery of Europe (New York, 1982), p. 145. A German translation of the full text appears in G. Jacob, Arabische Berichte von Gesandten an germanische Fürstenhöfe aus dem 9. und 10. Jahrhundert (Berlin, 1927). The translation "penny" is based on an emendation, but the Arabic word can in no way be read as "dinar." Jacob, p. 12, n. 6.

<sup>62</sup> See discussion in J. Pošvář, "Obchodní cesty v českých zemích, na Slovensku, ve Siezku a v Polsku do 14. století," Sleský sborník 62 (1964), pp. 54-63.

The ANS hoard indicates that types 543, 545 and 547 are probably consecutive types, although there are still not enough hoards known from early twelfth-century Bohemia to permit the construction of a complete chronology. More analyses of a larger sample of coins would be necessary to derive accurate figures for the silver content of the various types, but the analyses that have been done show that previous attempts to order the types chronologically on the basis of silver content are faulty and that the hoard evidence is a surer guide. Types 543, 545 and 547 may have been struck in the north of Bohemia between 1118 and 1120. If these types are representative, the volume of Bohemian coinage was larger than generally thought, and there may be a technical explanation, rather than the fiscal one of renovatio monetae, for the great variety of types in Vladislav's reign.

(PLATE 46) ALAN M. STAHL

From the late Roman period until the Renaissance, depictions of rulers on European coins were symbolic rather than specific. Attributes such as clothing, crown or scepter were used to indicate the office of the issuer, but no attempt was made to portray specific characteristics of the individual in whose name the coin was struck. An important break from this schematic approach to depiction, and from several other aspects of medieval coinage, came in 1231 with the issue of the gold augustalis for the Italian realms of Frederick II of Hohenstaufen. Whether the bust on this coin represented a generalized imperial image based on classical prototypes or an actual attempt to depict the physiognomy of Frederick remains, after much debate, uncertain.1 What can be said is that like so many aspects of Frederick's reign, his innovations in coinage were not immediately taken up by others. It has generally been held that the first true European coin portraits cannot be found before the middle of the fifteenth century, on the coins of the Sforza and other northern Italian princes.2

In Venice, the last of the Italian communes to maintain election of rulers, the anonymity of the ducal portrait on coinage remained a public concern through the fifteenth century. Under Nicolò Tron

<sup>&</sup>lt;sup>1</sup> H. Kowalski, "Die Augustalen Kaiser Friedrichs II," SNR 55 (1976), pp. 77-150.

<sup>&</sup>lt;sup>2</sup> H. Nussbaum, "Fürstenporträte auf italianischen Münzen des Quattrocento," ZfN 35 (1925), pp. 145-92; E. Bernareggi, Monete d'oro con ritratto del rinascimento italiano, 1450-1515 (Milan, 1954).

(1471-74) a new denomination, the lira, was introduced, whose obverse type was a portrait bust of the doge. In the reign of his successor the type was changed to a scene of an anonymous doge kneeling before Saint Mark. A contemporary chronicle noted that "tyrants put their images on coins, not heads of republics." An examination of silver grossi of doge Antonio Venier (1382-1400), however, has revealed an apparent attempt to introduce a ducal portrait on Venetian coinage almost a century before that of Tron.

The Venetian silver grosso was one of the most important European coins of the thirteenth and early fourteenth centuries. Introduced shortly before the Fourth Crusade of 1202, it was the monetary basis of Venice's commercial expansion in the eastern Mediterranean. In the mid-fourteenth century, it gave way to the smaller silver soldino and was no longer minted after 1356. In 1379, in the reign of Andrea Contarini, the grosso was reissued, on a new standard and with a modification in type.4 This second type of grosso maintained the traditional obverse of a standing doge and Saint Mark, but put the doge's head in profile. On the reverse, the enthroned figure of Christ was flanked by a star and a letter indicating the mint master, an alteration in the complicated system of symbols on the grosso of the first type. The obverse type was produced using punches for the body of the doge, the heads of the doge and the saint, and the hands of both figures. The punch for the doge's head is without distinctive character and has a cap of even peaks in front and back (Plate 46, 1 [ANS]). This punch was maintained through the brief reign of Michele Morosini (Plate 46, 2 [Papadopoli 5070] and into the reign of Venier (Plate 46, 3 [ANS]).

In 1394, the standard of the grosso was again altered by the Venetian Senate and a new type was ordered. This grosso of type three bore on the obverse two stars flanking the standing figures; on the reverse a longer legend was supplied and the symbol of the mint master disappeared. In the collection of the American Numismatic Society are 145 specimens of the type three grosso of Antonio Venier, deriving principally from three parcels purchased in recent years.<sup>5</sup> Because



<sup>&</sup>lt;sup>3</sup> N. Papadopoli, Le Monete di Venezia, vol. 2 (Venice, 1907), p. 19.

<sup>&</sup>lt;sup>4</sup> Papadopoli (above, n. 3), vol. 1 (Venice, 1893), pp. 207-9.

<sup>&</sup>lt;sup>5</sup> One of these is published as Parcel C in A. M. Stahl, "Three Parcels of Venetian Grossi in the ANS Collection," RIN 86 (1984), pp. 181-96.

of uncertainty as to provenance, it cannot be determined whether these parcels are derived from separate hoards. However, as all contain grossi of Venier's successor, Michele Steno, it can be said that they all include emissions from his entire reign. Among the 145 coins are 108 obverse dies. Seventy-seven of these obverse dies were cut with the same punch for the doge's head as those of the type two grossi of Venier and of Contarini. They are presumably the earlier of Venier's type three grossi (Plate 46, 4 [ANS]).

The other 31 type three grossi dies of Venier were made with a punch for the doge's head which depicts a bearded man of strong features and mature age (Plate 46, 5 and 8, enlarged detail [ANS]). The nose is sharp and springs from an indentation at eye level. The cap has a single peak in the back; no curls appear behind. This depiction, unlike any of the generalized portrayals of doges on earlier Venetian coins, bears a strong resemblance to the marble portrait figure of Venier in the Museo Civico Correr, Venice (Plate 46, 9). This piece is attributed to the sculptor Jacobello Dalle Masegne and is believed to have been done from life, probably before 1394.6 The ducal promise of Antonio Venier in the Archivio di Stato, Venice, also contains a miniature portrait of him, again presumably from life, likewise showing a prominent beard and mustache.<sup>7</sup> These are among the earliest examples of Venetian portraiture and demonstrate the awakening of an interest in distinctive portrayal of specific characteristics of the doge. The introduction of a bearded doge onto the grosso was accompanied by the adoption of a new punch for the saint's head as well as one for his robe, which replaced the hand incised outline of his garment on earlier dies and rendered a more subtle, modelled aspect to the figure.

An estimate of the total number of dies used in the type three grosso coinage of Venier, following Carter's formulae, projects that the beard-



<sup>&</sup>lt;sup>6</sup> W. Wolters, La Scullura veneziana golica (Venice, 1976), p. 220, 142. The illustration of this sculpture (Plate 46, 9) taken from this publication is courtesy of Art, Print and Photography Division, The New York Public Library, Astor, Lenox and Tilden Foundation.

<sup>&</sup>lt;sup>7</sup> Giulio L., "Ritratti di doge in Palazzo Ducale," Rivista di Venezia, 12 (1933), p. 393; the caption assigning this portrait to Michele Steno is in error, as is obvious from the author's argument and the indiction date of six visible in the reproduction, which corresponds to Venier's oath of office and not Steno's.

less punch was used on 235 dies and the bearded one on 100.8 If the rate of die use was constant in the six years of this coinage, the bearded punch would have been introduced in 1398, about two-thirds of the way through the issue. Another possibility is that the bearded punch was used as a subtle marker of a further alteration in the coinage in October 1399.9

The introduction of the bearded, portrait punch to the grosso of Venier does not appear to have been followed on the ducat or the soldino, the other Venetian denominations that bear a representation of the doge. On grossi of Michele Steno, Venier's successor, the doge's head is made with at least two different punches, one bearded and one clean-shaven (Plate 46, 6 and 7); while both are different from the ones used under Venier, it is not certain whether either was meant as a portrait of this doge who, at least in most representations, appears to have been beardless.<sup>10</sup>

At the end of the fourteenth century, at the height of Venice's commercial power and in the later years of the reign of a popular doge, an individualized portrait of that leader was introduced onto the coinage of the Republic. Perhaps because of its diminutive size, it does not seem to have aroused objections among the citizens. It was in the late fifteenth century, when Venice's glory was beginning to wane, that contemporaries identified Tron's large portrait on a new denomination as the expression of tyrannical inclinations and restored the anonymous, formulaic rendering of the ducal image to Venetian coinage.

<sup>&</sup>lt;sup>8</sup> G. F. Carter, "A Simplified Method for Calculating the Original Number of Dies from Die Link Statistics," ANSMN 28 (1983), pp. 195-206.

<sup>&</sup>lt;sup>9</sup> Papadopoli (above, n. 4), p. 227.

<sup>10</sup> Lorenzetti (above, n. 7), pp. 387-98.

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## A NUMISMATIC RECONSTRUCTION OF KUSHANO-SASANIAN HISTORY

(PLATES 47-52)

MARTHA L. CARTER

If it were not for their coinage, very little would be known of the Kushano-Sasanians. The internal development of their coin types and sequence of their rulers have been fairly well established, although new readings of coin inscriptions and the discovery of new coin types often necessitate adjustments.<sup>1</sup> Nevertheless, the absolute chronology of the

<sup>1</sup> I agree with Bivar's relative chronology of rulers with some variations; see A. D. H. Bivar, "The Kushano-Sassanian Coin Series,", pp. 13 42; JNSI, 18 (1956), hereafter cited as Bivar. I cannot agree, however, with his absolute chronology which uses as its "linchpin" the identification of Hormizd Sakanshāh, brother of the Sasanian king Varahran II, with Hormizd I Kushanshah for reasons that will be elucitaded below. See Bivar, "The Absolute Chronology of the Kushano-Sasanian Governors of Central Asia," Prolegomena to the Sources of the History of Pre-Islamic Central Asia (Budapest, 1979), pp. 317-32. Bivar follows the numismatic pattern for the series laid down by G. Bataille, "Notes sur le numismatique des Kouchans et des Kouchanshahs," Arethuse, 5 [1928], pp. 28-34, and also E. Herzfeld, Kushano Sasanian Coins: Memoirs of the Archaeological Survey of India no. 38 (Calcutta, 1930). V. G. Lukonin, "Kushano-sasanidskiye monety," Epigrafika Vostoka 18 (1967), pp. 16-33, generally follows the same sequence although his dating begins the series in the mid-fourth century and goes on to approximately mid-fifth (ca. 367 to 440), thus beginning a hundred years after Herzfeld and Bivar. This chronology is bound up with a third century date for the foundation of the Kushan Empire of Kanishka I. See E. B. Zeymal, Kushanshkaya Khronologia (Dushanbe, 1968). R. Göbl also subscribes to a similar late dating of the beginning of the Kanishka I dynasty, and squeezes the whole of the Kushano-Sasanian era into the second half of the fourth century ("Die Münz-



Kushano-Sasanians is still uncertain, as is their relation to the main dynasty of Sasanian Iran and to the Kushan rulers whose territories they conquered.

The period of Sasanian incursions into Kushan lands must have begun shortly after the accession of the first Sasanian monarch Ardashīr I in A.D. 226. So, too, Sasanian control could not have long outlasted the onslaughts of the Kidarites, Chionites, and Hephthalites beginning in the mid-fourth century. Wei Dynasty annals relate that a Kushan king Po-t'iao (Vāsudeva) sent an embassy to China which arrived on January 26 of the year 230, and thereupon received the title "King of the Ta Yüeh-chi allied to the Wei." It seems likely that this mission was sent to seek Chinese aid against an impending Sasanian invasion. At about the same time, Armenian chronicles note an attempted alliance between their ruler Khosroes I and a Kushan king Vehsadjan (again Vāsudeva)

prägung der Kušan von Vima Kadphises bis Bahram IV," in F. Altheim and R. Stiehl, eds., Finanzgeschichte der Spätantike [Frankfurt/Main, 1957], pp. 173-256; and Dokumente zur Geschichte der iranischen Hunnen in Baktrien und Indien [Wiesbaden, 1967], 2, pp. 269-318; hereafter eited as Göbl, Iranischen Hunnen). The earlier dates are generally subscribed to by C. J. Brunner, "The Chronology of the Sasanian Kushānshāhs," ANSMN 19 (1971), pp. 145-65; hereafter eited as Brunner. Neither the earlier dating cycle nor the later one appears to fit comfortably with the historical and numismatic evidence. The former leaves the whole of the first half of the fourth century with far too few Sasanian Kushānshāhs; and the second begins the Sasanian intrusion into the Kushanshahr with Shāpūr II in the mid-fourth century, ignoring the strong probability of conquests by the Sasanian kings, Ardashīr I, Shāpūr I, and Varahrān II during the third century.

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<sup>2</sup> This information comes from the Wei-chih written after 386, but very likely accurate on this point. See P. Pelliot, "Tokharien et koutchéen," Journal Asiatique (1931), p. 23; R. Ghirshman, Begram: Mémoires de la délégation archéologique française en Afghanistan, 12 (Cairo, 1918), pp. 156-57; also J. Rosenfield, Dynastic Arts of the Kushans (Berkeley, 1967), p. 105; hereafter cited as Rosenfield.



against Ardashīr.<sup>3</sup> Tabari informs us that Ardashīr I, after his conquests, allowed the Kushan king to remain on his throne in a vassal position.<sup>4</sup> There were at least two and possibly three or more Kushan Vāsudevas. Evidence suggests that the ruler in question was Vāsudeva I, the last great emperor of the Kanishka dynasty who ruled until the year 98 of the Kanishka I Era (see Appendix 1). If Cribb is correct in his interpretation of the direct succession of rulers after Vāsudeva I, a Vāsudeva II could not have ruled the Kushan empire until after the year 141 (the date of the Kanishka III Ārā Inscription), and must have presided over a much diminished state in the Punjab.<sup>5</sup> In any event, Tabari's state-

- <sup>3</sup> Moscs Khorenats'i History of the Armenians, trans. R. W. Thomson (Cambridge, 1978), pp. 218-19 (72). King Khhosrov of Armenia was promised aid from his "kinsman" Vehsajdan (Vehsachan) at Balkh who is said to be of the Karen Pahlav branch of the Arsacids, a seemingly odd notion. The aid did not materialize, needless to say. This link between the Armenians and the Kushans via a branch of the Arsacid Dynasty is mentioned by other Armenian historians as well. See Agathangelos (Tiflis, 1909), p. 17, line 10, and also Thomson, p. 214, n. 3.
- <sup>4</sup> According to Tabari (1, 280), envoys of the kings of Tūrān, Makran, and Kushan were sent to Ardashīr to offer their submission. See T. Nöldeke, Geschichte der Perser und Araber zur Zeit der Sasaniden aus der Arabischen Chronik des Tabari (Leiden, 1879), p. 17. Ardashīr followed the example of the Arsacids in the initial stages of the formation of the Sasanian state. See also M. L. Chaumont, "États vassaux dans l'empire sassanide," Acta Iranica 1, 2nd ser. (1975), pp. 125–26. Tabari tells us that Ardashīr's assault on the Kushan Empire was through Khorāsān via Merv to Bactria, from which he retreated to Merv as his base of operations.
- J. Cribb, "Gandharan Hoards of Kushano-Sasanian and Late Kushan Coppers," CH 6 (1981), p. 107; herafter cited as Cribb. The problem of the number of Väsudevas in Kushan chronology has always been vexing. The coinage of Väsudeva I, last of the line of kings belonging to the Kanishka I Kushan Dynasty, include the "trident in field" and "long-haired" obverses, and form a cohesive unit which lasts until approximately the centenary of the era of Kanishka I (KE I). If there is another Väsudeva who follows this king, as Harmatta and Göbl have postulated (see Appendix), he ruled over Bactria only as a schismatic king, and quickly came under Sasanian domination. This king is sometimes called Vasudeva II, although I prefer to call him the "Bactrian Vāsudeva." It seems most reasonable to assume that the century of the second Kanishka Era (KE II) directly follows KE I. See especially the theories of J. E. Van Lohuizen-de Leeuw, The Scythian Period (Leiden, 1949), pp. 235ff. et al. In omitting the "hundreds" the chronology starts over again from the year 1. Misplaced kings have now found their true place in the KE II. According to Mathuran inscriptions, Kanishka II ruled until at least the year (1)17, and is followed by Vāsishka who ruled until at least (1)28. If we place the Ārā Inscription in its



ment, taken at face value, indicates that no Sasanian-Kushānshāh was appointed after the conquests of the first Sasanian ruler, who seems to have pulled his newly created empire together within a ring of vassal states.

In spite of this evidence, there is some confusion as to the identity of an early Sasanian Kushānshāh or Kushānshāhs who bear the name Ardashīr on Bactrian inscribed copper issues. If this ruler is not Ardashīr I, who might he be? There has been the temptation to identify Sasanian Kushānshāhs with Sasanian kings or crown princes, which, if we consider the evidence of the most authoritative source of midthird century Sasanian history, the Ka'abah of Zoroaster inscription of Shāpūr I (SKZ), does not seem possible, at least before its date of A.D. 262.6 According to its information there were three rulers named Ardashīr under Ardashīr I, all probably his sons. One, Ardashīr Kirmanshāh, described specifically as Ardashīr I's son by Tabari, remained king of Kirman under Shāpūr I and was still ruler there in 262.7 The second

proper context, it tells us that a mahārāja rājātirāja devaputra kaisara Kanishko ruled after Vāsishka in the year (1)41. Thus, this ruler would be Kanishka III. Since he probably did not reign up to the year 57 of KE II, the year of the last dated Mathuran inscription, he was succeeded by another Vāsudeva whose coins follow his in numismatic sequence, according to Cribb. This ruler would be Vāsudeva II of the main sequence. Possible another Vāsudeva (Vāsu) follows this one directly, but he may never have ruled at Mathurā at all.

6 M. Sprengling, Third Century Iran, Šapor and Kartir (Chicago, 1953), pp. 19-22, 89-97 et al. This inscription was discovered in 1936 by the mission of the Oriental Institute of the University of Chicago on the lower part of an Achaemenid monument at Naqsh-i-Rustam near Persepolis. It was found in two versions, one Parthian Pahlavi, the other Sasanian Pahlavi. In 1937 a preliminary publication of it was made by M. Sprengling, "A New Pahlavi Inscription of Sapor I," American Journal of Semitic Languages 53 (1936-37), pp. 126-41; and "Zur Parsik Inschrift an der Kaaba des Zoroasters," ZDMG 91 (1937), pp. 652 ff. W. B. Henning followed with "The Great Inscription of Sapor I," BSOS (1937-39), pp. 823-29. In 1939 a Greek version was discovered on the same monument. This was first treated by Sprengling in 1953 and subsequently published by A. Maricq and E. Honigmann, "Recherches sur les Res Gestae Divi Saporis," Mémoires de l'académie royal de Belgique (lettres) 47 (1953), pp. 7-79, and by Maricq alone, "Res Gestae Divi Saporis," Syria 35 (1958), pp. 295-360.

<sup>7</sup> See Nöldeke (above, n. 4), and W. B. Henning, "Notes on the Great Inscription of Sapur I," in *Professor Jackson Memorial Volume* (Bombay, 1954), p. 49.



Ardashīr had been king of Sakastan under Ardashīr I, and was replaced after Shāpūr's accession by his own son Narseh, whose territories at this time swallowed up the vassal state of Tūrān, and also included parts of Sind, probably the lower Indus Valley.8 The third Ardashīr, mentioned in the SKZ as ruling under Ardashīr, was Ardashīr I Mervshāh. There is no mention of a Mervshäh ruling under Shāpūr I. Henning and others have suggested that this Ardashīr became a Kushānshāh,9 but this is unlikely up to the year 262, since no such title appears in the SKZ; and it is proclaimed that Shāpūr himself ruled the eastern frontiers "up to Pashkibor" (Peshāwar).10 It would appear from the evidence of the SKZ that Shāpūr I, probably in the 240s, had reinforced Sasanian rule on Iran's eastern borders, adding the lands of Tūrān and lower Sind to Sakastan for his son Narseh to rule. He also perhaps annexed Merv as a strategic "royal province," while further campaigning against the unruly Bactrians and subjugating the Kabul Valley. The details of these campaigns are unclear, although the Kushan king who opposed him in



<sup>&</sup>lt;sup>8</sup> Nöldeke (above, n. 4), p. 43 ff. There had been some question on the reading of Turkestan in the text, but Henning settled the question and the Sakanshāh Narseh may be seen as "king of India, Sakastān, and Tūrān up to the shore of the sea." Under Ardashīr I there appears to have been a vassal king of Tūrān named Ardamitra, whose coinage disappeared with the advent of Narseh Sakanshāh under Shāpūr I. See M. Mitchiner, *Indo-Greek and Indo-Scythian Coinage: The Indo-Parthians*, 8 (London, 1976), pp. 771 and 781.

<sup>&</sup>lt;sup>9</sup> Henning (above, n. 7), p. 19.

<sup>10</sup> See Chaumont (above, n. 4), p. 121 and n. 181. Pashkibor (Pškbwr in Pahlavi) is rendered Paskibouron in the Greek text. Most scholars interpret this to be Peshäwar. See W. B. Henning, "The Date of the Sogdian Ancient Letters," BSOAS 12 (1918), p. 54. A. Maricq disagrees, noting that Purūshāpurā, the Sanskrit name of the city, does not correspond with the Pahlavi or Greek names in Memoires, (above, n. 6), pp. 91–94 and 98—106. As Frye points out, however, Shāpūr states that he holds the Kushanshahr up to Pashkibur, and to the borders of Kash, Sogdiana, and Tashkent, the first being on the Indian subcontinent, the others in Central Asia. R. Frye, "Napki Malka and the Kushano-Sasanians," in D. Kouymjian, ed., Near Eastern Numismatics, Iconography, and History: Studies in Honor of George C. Miles (Beirut, 1974), p. 119. Obviously some of the Kushan Empire, and most likely that adjacent to Iran, had been taken by the Sasanians, while from Peshawar to the East the Kushans still ruled.

Kabul and withdrew to Peshāwar was most probably Kanishka II.<sup>11</sup> Why a ruler had not been appointed by Shāpūr for his Kushan realm, as had been the case in Sakastan, remains a mystery.

One very early series of Kushano-Sasanian copper issues is a rare type approximately 3.5 g in average weight. It displays on the obverse a sacrificing king in Kushan style, and on the reverse (Plate 47, 1) an enthroned radiate deity holding a royal diadem. The inscription on the obverse has been read by Bivar and others as Šaboro košono šao in non-ligated Kushan Bactrian. Cribb has recently found an example with the inscription on the obverse in good condition which he reads Ardošoro košono šao. Although the standing image of the ruler has obvious

11 Ghirshman (above, n. 1), pp. 157-58, concluded long ago that soon after Shapur I assumed rule in 241, he began a campaign (more likely a series of them) to subjugate the vassal states left to him by his father. Ardashir I probably never controlled the Kabul Valley or any part of Gandhara or Arachosia. The Kushan ruler whom Shāpūr encountered in the Kabul Valley (Begram) and probably defeated was most likely to have been Kaniskha II, who ruled for approximately the first 20 years of KE II. (See Appendix). His coins were found in large numbers at Begram. See H. H. Wilson, Ariana Antiqua (London, 1851), p. 380; also Rosenfield, pp. 109-10. According to J. E. Van Lohuizen-de Leeuw, "The Second Century of the Kanishka Era," abstract of a paper delivered at the British Museum Colloquium of Late Kushan Numismatics (1981), an obviously well-developed Buddhist relief from Gandhāra made during the year 5 of Kanishka, according to its inscription, was actually made in the year 5 of Kanishka II. It seems likely that this ruler continued to control Gandhāra throughout his reign. V. G. Lukonin, "Zavoenaniya Sasanidov na vostoke e problema kushanskoi absolutnoi chronologii," Vestnik Drevniye Istorii (1969), pp. 34-44, believes that Shāpūr I mounted a second campaign between 245 and 219, which is entirely possible.

12 See Herzfeld (above, n. 1), p. 29; Bivar, pp. 22, and 31-32, no. 21. Both Herzfeld and Bivar place this coin at the head of the series. Bivar notes that the script is not much ligated, and that the aspirate, regularly written in cursive form from the time of Hormizd I Kushānshāh onward, is here simply indicated by a hiatus. Brunner, p. 159, places this coin at the end of his series with those of Shāpūr II.

13 Cribb, p. 98, first read the name "Saboro" but later discovered an example reading "Ardosoro." The coin which B. N. Mukherjee has suggested is a late Kushan dinar with the Kushan ruler wearing a crenelated crown like that of Shāpūr appears to be incorrect, since in photographs of the same coin, which I have seen, there is no such feature. ("The Historical Significance of a Gold Coin of Vāsudeva II," JNSI 1974, pp. 109–10.)



Kushan numismatic prototypes from Vāsudeva I to Kanishka II and Vāsishka, the king is shown here as a royal Sasanian personage. He is heavily bearded with a round bunch of hair at the back of his neck, wears a tunic and diaphanous, windblown Sasanian trousers, and holds the hilt of a long sword. In his left hand he grasps a round-topped staff which appears to have streamers and may be a banner. The altar before him, unlike those seen on Kushan issues, is a narrow-shafted type with vertical side elements, possibly handles, similar to representations of portable altars seen on Sasanian gems. 4 A curl of smoke above the altar indicates combustion. A triangular triple-dot motif occurs under the left elbow, and a swastika has been placed between the legs of the ruler and the altar. The swastika and triple-dot combination are also found on the obverse of sacrificing ruler representations on "Vāsudeva" type gold proto-scyphates (Rosenfield's type V), but here the swastika is located between the king's feet.15 Unlike these, the Kushano-Sasanian coppers have no nandipada device on the right side. On the protoscyphates of Rosenfield's types IV and V the triple dots occur either above or below this symbol, or between the ruler's feet. 16 It seems probable that both the triple-dot and swastika motifs mark Sasanian hegemony over conquered Kushan lands in the proto-scyphate gold series. The swastika first occurs, albeit rarely, on Sasanian silver drachms of Shāpūr I; and the triple dots on drachm reverses occur from the period of Ardashīr I to Narseh.<sup>17</sup> The gold proto-scyphates, in large part, must have been made to circulate with early Kushano-Sasanian coppers, such as the one in question, although this copper shows a much more distinctly Sasanian ruler who has an Iranian name.



<sup>&</sup>lt;sup>14</sup> See A. D. H. Bivar, Catalogue of the Western Asiatic Seals in the British Museum: Stamp Seals—The Sassanian Dynasty (London, 1969), pp. 108-9, pl. 26 (LG 1, 2, and 4); also C. J. Brunner, Sasanian Stamp Seals in the Metropolitan Museum (New York, 1978), pp. 119-21.

<sup>&</sup>lt;sup>15</sup> Rosenfield, pp. 108-9 and pl. 11, no. 229, also pl. 12, nos. 230-32. It appears certain that the proto-scyphates are close in time to this issue.

<sup>&</sup>lt;sup>16</sup> Rosenfield, pl. 11, no. 244 (type IV) above, no. 225 (type IV) below, no. 226 (type IV) between feet, no. 228 (type IV) between feet.

<sup>&</sup>lt;sup>17</sup> See R. Göbl, Sasanian Numismatics (Braunschweig, 1971), table 6, Shāpūr II issues; hereafter cited as Göbl A. Gordus, "Analysis of Parthian, Sasanian, and Umayyad Silver Coins," in Near Eastern Numismatics, Iconography, and History: Studies in Honor of George C. Miles (Beirut, 1974), p. 156, table 2, UM no. L-522 (Göbl type I-1) and table 4, no. 10.

The most important feature of Sasanian numismatic imagery is the personal royal crown or crowns of each specific ruler. The standing king of the first Kushano-Sasanian copper treated here wears a crown with two distinct crenelations, one in front and one in back of a high central element. The crenelations immediately recall those of the crown of Shāpūr I, although it is possible that, instead of the Sasanian korymbos, a tall Kushan helmet-crown is intended. It is clear that the ruler represented is a Sasanian, specifically Shāpūr I, victorious over the Kushans. It could not be Ardashīr I, although one of his minor crown types is crenelated, since the hair ball at the back of the neck does not appear on Ardashīr I coins, and only begins with Shāpūr I. Coppers of Shāpūr I and Hormizd I both show an abbreviation of this hair style in a similar round group of dots. 19

The question of whether all of these early Kushano-Sasanian copper coins are inscribed with the name of an Ardashīr Kushānshāh or a Shāpūr Kushānshāh has not been entirely resolved. Possibly they are inscribed with either, necessitating only a recut die. The reason for this, however, is unclear. The obverse image is undoubtedly an advertisement of a victory by Shāpūr I. Probably, if Saboro and Ardosoro both occur on this series, Ardosoro was Kushānshāh after 262 and changed the inscription on the dies to his own name, while still retaining the image of the Sasanian ruler Shāpūr I.

A second very early Kushano-Sasanian copper shows on the obverse, in typically Sasanian style, the bust of a ruler with a tied beard and fluffy hair ball, wearing on his head a crown in the form of a bird with a curved upraised wing, a long neck, and a curved beak holding a pearl. There are no clear inscriptions on the obverse of this type, although Bivar has tentatively read the name "Ardashīr" in Pahlavi on the reverse (Plate 47, 2).<sup>20</sup> The bird crown of this ruler, who seems on typological grounds to have been a Kushānshāh, is most unusual. The only Sasanian ruler

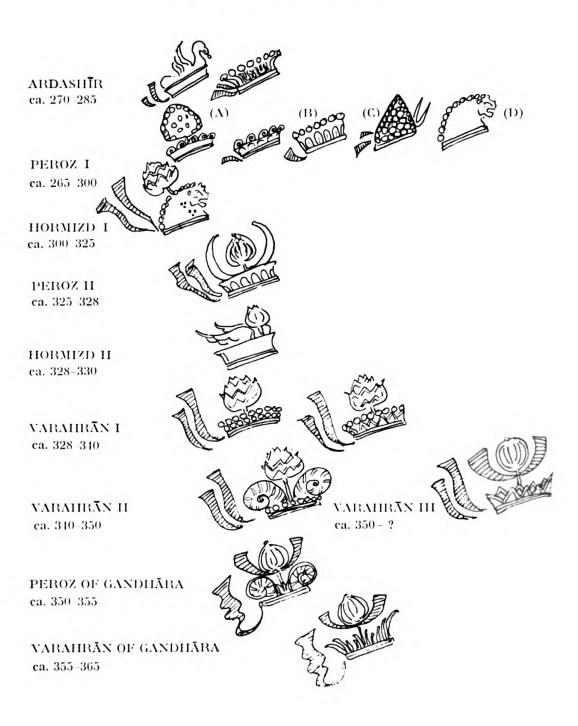


 <sup>18</sup> Göbl, pl. 1, nos. 11 15 (crenelated crown with long straight hair); pl. 2, nos.
 21-34 (Shāpūr's massive curls behind head).

<sup>19</sup> Göbl, pl. 2, nos. 27-28 (Shapur I); pl. 3, no. 37 (Hormizd I).

<sup>&</sup>lt;sup>20</sup> Bivar, pp. 23, and 32, nos. 22 and 22a; Brunner, pp. 147-18; M. Mitchiner, Oriental Coins and Their Values: The Ancient and Classical World (London, 1978), p. 200, nos. 1264-65; hereafter cited as Mitchiner. In private communication Göbl does not see the name as legible on any specimens.

Table 1
Crowns of the Sasanian Kushānshāhs



with a bird crown is Hormizd II (303-9); but his crown is that of a shortnecked, straight-winged eagle holding a pearl in its beak, emblem of the war god Verethragna, whereas the representation on the Kushano-Sasanian coin crown is of some sort of gallinacious bird such as a peacock, unheard of in Sasanian crown imagery.21 This bird, however, may have had great significance to the Indianized Kushans as the emblem of the war god son of Śiva, Kārttikeya, and would in this case have been adopted because of its significance in the region.<sup>22</sup> The first Sasanian king to use wings as a crown element was Varahrān II (276–93), although the wing is usually a straight type.23 A notable exception to this standard crown type may be found on a silver drachm which shows Varahrān's crown with elegantly curved wings and, in front of the ruler's profile, the name of Merv written in full in Pahlavi (Plate 50, 43). This is a most unusual and very early mint mark; and Merv, as we shall see, may have been the location of a mint that identified itself many years before the practice became routine in Sasanian numismatics. Indeed, the style of portraiture of the bust of the "bird-crown" king places it in the last quarter of the third century during the reign of Varahrān II.24

A third copper issue, close in type to the preceding one in all respects, is far more common than the others (Plate 47, 3). Again we see a bust with prominent hooked nose, tied beard with triple dot ending, and lobe-shaped bushy curls at the back of the neck. The ruler's crown is made up of a series of palmettes topped by a row of large pearls. In this case, the Pahlavi inscription is "the Mazda-adoring Lord Ardashīr, Great Kushān-shāh," and the ruler's name seems fairly certain.<sup>25</sup> In front of the profile

<sup>&</sup>lt;sup>25</sup> Bivar, pp. 23, and 32, no. 22. The inscription begins at 3:00 and reads, according to Bivar, Mzdysn bgy // 'rthštr // RB' kwš'n MLK'. Brunner, p. 148, reads the same. Göbl, in a private communication, is not convinced.



<sup>&</sup>lt;sup>21</sup> Göbl, pl. 5, nos. 80-87.

<sup>&</sup>lt;sup>22</sup> The Yaudheyas who came to power with the decline of the Kushans in the Ganges Valley regularly featured on the obverse of their copper issues the war god Kārttikeya (Skanda) standing with his peacock. See Mitchiner, pp. 591-92. Kārttikeya is a deity associated with Siva, and may have served as a replacement for the Verethragnian eagle to the Kushano-Sasanians. The peacock, like the cock, may also have served as a solar symbol.

<sup>23</sup> Göbl, pl. 4, nos. 54-70.

<sup>&</sup>lt;sup>24</sup> The hairstyle of the Sasanian kings on their coin portraits is fairly linear under Shāpūr I, becoming softer with Hormizd I and Varahrān II. The profile of Varahrān II, however, shows a thicker, more massive neck. (See Göbl, pls. 3 and 4).

is the Pahlavi abbreviation MR, characteristic of later Merv issues. The reverse displays a goddess enthroned frontally under an aedicula, wearing a crenelated crown, much like the standing goddess on the reverse of the bird-crown ruler's coin (Plate 47, 2). The style and mint mark of this coin, which can be identified as belonging to a relatively powerful ruler minting at Merv, may be compared to the unique Varahrān II silver drachm (Plate 50, 43), which, due to its larger format, gives the full mint identification in front of the king's profile. Since these two rulers, both minting in the same location, were also ostensibly close in time, some significant events must have brought this about. We know that under Varahrān II a rebellion took place on Iran's eastern borders between approximately 280 and 285 led by Varahrān's younger brother Hormizd, who was at that time Sakanshāh. According to Roman sources, he joined forces with the Kushans and Gilans, causing Varahran to leave his confrontation with the Romans on the western frontier and hasten with his armies to the east where he eventually quelled the revolt and pacified the region.<sup>26</sup> Probably around 285 Hormizd was deposed and replaced by Varahrān's son, also a Varahrān, who was to become the ill-fated and short-reigning Varahrān III.27 Varahrān's campaigns seem to have taken him as far as the northern banks of



<sup>26</sup> Panegyrici latini, 12 (ed. Baehrans), p. 288: "Ipsos perses ipsumque regem adscistis sacis et ruffis (cussis) et gelis petit frater Ormies nec respecit vel pro maiestati quasi regem pro pietate quasi fratrem." J. Marquart, Eranšahr (Berlin, 1901), p. 36, originally changed ruffis to cussis (i.e., Kushans), which is a much more likely rendering of the original text. See also Historiae augustae scriptores, sub Carus 8, Eutropius, 9, 18. One of the coins illustrated by Göbl, pl. 4, no. 57, shows a double portrait of Varahrān II and his queen. Varahrān's crown has a curved wing. On the reverse above the fire altar is an inscription of four Pahlavi letters (table 16, no. 87), which he reads as HNPY, indicating that it may be the first known Sasanian mint mark. This might be Herat. See also V. G. Lukonin, Kultura sasanidskogo Irana (Moscow, 1969), pl. 7, no. 4, 6 and reverse. Here is another example of a Varahrān II drachm of the same curved wing crown type, showing the ruler facing a prince on the obverse. The reverse has a similar mint mark.

<sup>&</sup>lt;sup>27</sup> The reason that we know of his success is that Varahrān III turns up in the Paikuli Inscription as the Sakanshāh. He was, no doubt, appointed after the fall of his uncle Hormizd. See E. Herzfeld, *Paikuli*, 2 vols. (Berlin, 1924); R. Frye, "Notes on the Early Sassanian State and Church," in *Studi orientalistici in onore de G. Levi della Vida* (Rome, 1956), vol. 1, pp. 314-35; J. Gagé, *La montée des Sassanides* (Paris, 1964), pp. 279-91.

the Oxus around Termez. There is archaeological evidence that the Buddhist site of Karatepe near Termez was destroyed by Sasanian forces around A.D. 285.28 One of its sanctuaries became a Zoroastrian shrine. According to Harmatta, the earliest Pahlavi inscription at the site dates from 286, and must have been made shortly after the conquest.29 The obvious base of operations for a Bactrian campaign against Kushans would have been Mery.

The reason for the destruction of the Buddhist shrine and its replacement by a Zoroastrian one may be found in the doctrines of the illustrious self-proclaimed "Great Mobad of the Sasanian Empire" Kartir, who appears to have been the prime organizer of a national Sasanian orthodoxy. Beginning as a minor figure on the outskirts of power under Shāpūr I, Kartir rose to such prominence under Varahrān II that he was acknowledged his "soul savior" and companion in conquest, seeking to destroy all evil religions and heresy within the empire.<sup>30</sup> One can readily imagine that Kartir would have sought the destruction of this stronghold of the divs, and its transformation into a center for Zoroastrianism.

If we may assume that there was during this era of rebellion a Kushān-shāh ruling at Merv, also in control of at least parts of Bactria and the Kabul Valley, he was most probably by that time exercising significant independence of action in relation to central Sasanian authority. This situation may have manifested itself gradually with the demise of Shāpūr I, the weak reigns of Hormizd I and Varahrān I, and the preoccupation of Varahrān II with the Romans in the west. The



<sup>&</sup>lt;sup>28</sup> See Buddiiskii Kullorii Tsentr Karalepe v starom Termeze, ed. B. Stavisky, vol. 1 (Moscow, 1964); vol. 2 (Moscow, 1969); vol. 3 (Moscow, 1972); vol. 4 (Moscow, 1982).

<sup>&</sup>lt;sup>29</sup> J. Harmatta, "The Bactrian Wall Inscriptions from Karatepe," vol. 2 (above, n. 28), pp. 120-25. Harmatta begins the Sasanian chronology found here with A.D. 206. The inscription would thus date from the year 80 or A.D. 286.

<sup>&</sup>lt;sup>30</sup> Kartir left a list of his achievements in four rock inscriptions: one at Naqshi-Rustam (KNR), one on the Ka'abah of Zoroaster (KKZ), one at Sar Meshed (KSM), and one at Naqsh-i-Rajab (KNRb). For the Naqsh-i-Rustam Great Inscription see C. J. Brunner, "The Middle Persian Inscription of Kirder," in Studies in Honor of George C. Miles, pp. 97-113. For the Sar Meshed see P. Gignoux, "L'inscription de Kartir a Sar Meshed," Journal Asiatique, 256 (1968), pp. 411 ff. See also M. Sprengling, "Kartir, Founder of Sasanian Zoroastrianism," American Journal of Semitic Languages 57 (1940), pp. 197-228.

Kushans who were supposedly allied with Hormizd Sakanshāh around 283 were likely led by Ardashīr "Great King of the Kushans," not by any actual Kushan king. Thus, both rebellious Sasanian princes were destroyed by Varahrān II. This would account for Varahrān's special Merv minting and the termination of the independent course set by the Kushānshāh Ardashīr whose reign probably began around 270 and ended ca. 285. We do not know whether a governor was set over the Kushan provinces, although if there was one he, like the Sakanshāh, never minted any coins and faded quickly after the death of Varahrān II in 293.

If we examine the reverses of these three copper issues, we are struck by their unusual character, distinct from both Sasanian and Kushan types. The silver and copper issues of the Sasanian king Ardashīr I show a royal throne, backless, with ribboned lion legs superimposed on a fire altar.31 Under Shāpūr, a tall fire altar is shown with guardian figures on either side. This reverse remained the most frequent by far during the rest of the Sasanian era. 32 The reverse of the first Kushano-Sasanian copper type, given to either Saboro or Ardosoro, exhibits a deity on a high-backed throne seated toward the right and holding out a ribboned ring with his right hand and a sword between his legs with his left (Plate 47, 1). Inscribed on the left at 10:00 we find Bago in Bactrian, and on the right Miiro. The figure is dressed in a Sasanian ripplingdraped costume and wears shoes with Sasanian ribbon ties. A full beard and head of hair is shown with typically Sasanian hair balls on either side of the neck. A spiked nimbus appears around his head, and jagged flames emanate from the back of his body. Behind the high-backed throne is a circular device topped by "antennae." The circle is joined at its base by a shaft to a flat base with curved "legs" in the manner of many Sasanian monograms.

Identification of the deity as "Lord Mithra" is most helpful. It follows the Kushan tradition of identifying the many deities on their coin



<sup>&</sup>lt;sup>31</sup> See Göbl, table 1, 1a, p. 11, and pl. 2, nos. 19-20. This combination of forms is thoroughly discussed by P. O. Harper in "Thrones and Enthronement Scenes in Sasanian Art," *Iran* 17 (1979), pp. 51-64. See also J. Duchesne-Guillemin, *Symbols and Values in Zoroastrianism* (New York, 1976), p. 66.

<sup>&</sup>lt;sup>32</sup> See Göbl, table 2. Under Shāpūr I the guardian figures face outward (pl. 2, 21-21). Except for investiture scenes with ruler and deity on either side of the fire altar, the pair of figures continues to face outward until Narseh's reign. From that point the figures always face inward.

reverses; although this Mithra is far different from the representations of Mitro seen on Kushan issues. The Kushan Mitro is a standing, beardless, radiate figure, wearing tunic, mantle and boots, bearing little resemblance to the deity on the Kushano-Sasanian coppers.<sup>33</sup> Neither does he resemble the Sasanian Mithra (Mihr) who is never shown flaming or enthroned.34 In fact, his pose with investiture ring, seated on a high-backed throne, is strongly reminiscent of the Parthian rock relief at Susa of Artabanus V investing a vassal.35 The Kushano-Sasanian Miiro displays a character different from either Kushan or Sasanian types. Bivar has pointed out that this deity bears a strong resemblance to a type found on the reverses of the Indo-Greek king Hermaeus (Plate 50, 44).36 Here, although seated in the opposite direction, the figure is similarly enthroned, bearded, and radiate and wears a Phrygian cap. Thus, he may be identified quite reasonably as Zeus-Mithra.<sup>37</sup> The same deity appears on the reverses of Sasanian-type drachms minted by Peroz I Kushānshāh and his successor Hormizd I Kushānshāh, possibly at Herat.38



<sup>33</sup> For the iconography of the Kushan Miiro see Rosenfield, pp. 81-82, pl. 3,50-51; pl. 4, 118-31. See also the Elios (Helios) of Kanishka issues (p. 77, pl. 2, 30-31), who wears a long tunic mantle and boots.

<sup>&</sup>lt;sup>34</sup> Actual representations of Mihr are rare. The only monumental representation is on the relief of Ardashir II at Taq-i-Bustan. Here he appears in royal Sasanian costume and hair dress holding the sacred barsom. He may be distinguished by his radiate nimbus. R. Ghirshman, Persian Art (New York, 1962), fig. 233. Ghirshman also illustrates a seal (fig. 298) showing a radiate bust of Mithra above a pair of winged horses representing his chariot.

<sup>35</sup> Ghirshman (above, n. 34), fig. 70.

<sup>&</sup>lt;sup>36</sup> Bivar, p. 22. See also Mitchiner, p. 295, no. 2006 (Kāpiśa mint); p. 296 nos. 2009-23 (according to Mitchiner variously minted at Kāpiśa, Panjhir, Arachosia, and Chach); see also p. 297, nos. 2024-28, nos. 2033-35; p. 298, nos. 2036-47.

<sup>&</sup>lt;sup>37</sup> See A. D. H. Bivar, "Mithraic Images in Bactria: Are They Related to Roman Mithraism?" in *Mysteria Mithrae: Études préliminaires aux religions orientales dans l'empire romain*, vol. 24 (Leiden, 1979), pp. 741-50. Bivar gives a general picture of the range of solar iconography on Indo-Greek and later coin series.

<sup>&</sup>lt;sup>38</sup> Bivar (above, n. 37), p. 746. The deity is certainly not the Buddha, as suggested by Herzfeld (above, n. 1), p. 31. The problem of the choice of bago prefixed to Miiro is an interesting one. Mary Boyce has investigated the development of the use of baga (i.e., god) from Achaemenid to Sasanian times in Iran. Old Persian commonly uses baga in describing Ahura Mazda as baga vazraka (great god), and for names of holy places such as Bagastana (Behistun). In Sasanian inscriptions yazdan for "god" is used in third century Fars, yet the Manichaeans of the same region and time regularly

Clearly, we have here a type of Zeus-Mithra as a royal investing deity quite different from that which preceded it, as if to signal a change in dynasty and its politico-religious affiliations. This may well have been done to enlist the support of a certain resident population in captive territories whose chief deity had formerly been neglected by the Kushans, and one with whom Shāpūr I might have felt a special affinity. It is probable that by this coin reverse Shāpūr intended to woo Saka tribes who had been formerly under Kushan domination. Greater Sakastan or Sakadvipa was known in India from earliest times as the site of origin of the cult of a supreme solar deity strongly identified with the element of fire. The cult of this deity, later known as Mihira, Sūrya, etc., was brought by Saka priests from their homeland to western India, where they were known as maga.39 A great exodus of maga seems to have taken place around 300 or slightly earlier, probably the result of the establishment of Zoroastrian orthodoxy under Sasanian rule in Sakastan after the occupation of Varahān II.40

By the time of Hermaeus, the Saka chief deity, who may have been known as Zeus-Helios to the Indo-Greeks, had gradually evolved into a Phrygian-capped Zeus-Mithra. He was totally ignored by the Kushans, who utilized their own version of Helios-Miiro in their numismatic pantheon. Shāpūr I seems to have adapted the Saka solar Zeus to his own taste, endowing the god with characteristics of the Sasanian chief god Ohrmazd, but retaining an essentially solar character.

The symbol beside the throne is a variant of the Gondopharan sign, first seen on Sasanian monuments in a pattern decorating the horse trappings of Prince Shāpūr (later Shāpūr I) on the great equestrian relief of Ardashīr I at Firūzabād.<sup>41</sup> Another similar sign appears on

used bag for their divine beings. Thus the Father of Greatness is bag wabarigan or bag burzist, the "true god" or the "greatest god." The Parthians and Sogdians used bag widely; see M. Boyce, "Varuna the Baga," Acta Iranica 21 (1981), pp. 62-73.



<sup>&</sup>lt;sup>39</sup> See M. Carter, "Mithra on the Lotus," *Acta Iranica* 21 (1981) pp. 80-86; H. von Stietencron, *Indische Sonnenpriester* (Wiesbaden, 1966), pp. 217 ff.; S. Chattopadhyaya, *Sakas in India* (New Delhi, 1967), pp. 43 ff.; L. Scheftelowitz, "Die Mithra-Religion der Indoskythen und ihre Bezeihung zum Saura und Mithras-Kult," *Acta Orientalia* 11 (1933), pp. 316 ff.

<sup>40</sup> See Carter (above, n. 39), p. 85-86.

 $<sup>^{41}</sup>$  See Ghirshman (above, n. 34), fig. 166, for this detail. This does not mean, however, that Prince Shāpūr was ever a Sakanshāh. We know from the SKZ that another Ardashīr had that office under Ardashīr I.

coin reverses of Shāpūr I, Varahrān I, Varahrān II, Narseh, Hormizd II, Shāpūr II, Varahrān IV, and Varahrān V.<sup>42</sup> The addition of "legs" to the base makes it a probable prototype for the Hephthalite sign.<sup>43</sup>

On the reverse of the bird-crowned ruler issues we find a female deity familiar to Sasanian Iran at least in appearance, who invests the standing king with a large ribboned ring (Plate 47, 2). In Iran she would have been considered a representation of Anāhitā, first seen investing Hormizd I on his drachm reverses, and later represented in the investiture relief of Narseh at Naqsh-i-Rustam.<sup>44</sup> Here, unlike other typically Sasanian coin reverse formulae, the fire altar between them is absent.

The palmette-crowned Ardashīr Kushānshāh reverses display an enthroned goddess seated under an aedicula holding out a ribboned ring and grasping a long staff (Plate 47, 3). She has a nimbus, long hair, and wears a mural crown like the Sasanian Anāhitā. Her enthroned pose, however, is strongly reminiscent of that of the Kushan Ardoksho. An attempt to supply a specific identity is suggested by the arched niche in which the goddess is seated. This appears to indicate a shrine or temple with an image inside. While the figure is Anāhitā-like and created under Sasanian influence, it may possibly represent the Great Goddess of Transoxiana, variously known as Nānā, Artemis, etc., investing the land's new Iranian ruler from her famous shrine at Balkh. 45 By whatever name, she appears to have had a great popularity in Bactria, Sogdiana, and Choresmia up to the Islamic period. 46 Images of a similar type, with crenelated crown, seated sideways on an animal or on a



<sup>&</sup>lt;sup>42</sup> Göbl, table 2 (Shāpūr I, Varahrān I), table 3 (Varahrān II), table 4 (Varahrān II), table 5 (Narseh, Hormizd II), table 6 (Shāpūr II), table 8 (Varahrān IV), table 9 (Varahrān V).

<sup>43</sup> See Göbl, Iranischen Hunnen, vol. 4, table 14, 1.

<sup>44</sup> Ghirshman (above, n. 34), fig. 218.

<sup>&</sup>lt;sup>45</sup> See G. Azarpay, "Iranian Divinities in Sogdian Painting," *Acta Iranica* 4 (1975), pp. 19–29, for the imagery and cult of Nānā in pre-Islamic Central Asia. The goddess has associations with royalty and royal ancestors. See especially fig. 6.

<sup>46</sup> See A. Belenitskii and B. Marshak, "Nastennye rospisi, otkrytye Pendzhikenta," Soobscheheniia Gosudarstvennogo Ermitazha, vol. 37 (1973), p. 59. One mural shows an image similar to that found on a copper reverse of Ardashīr Kushānshāh. The goddess is shown seated on a throne with outspread knees. Her attributes are a crown or scepter with ribbons in her right hand and a banner on a staff in her left. G. Azarpay, Sogdian Painting (Berkeley, 1981), pp. 132-39 and fig. 34.

throne, are well known from representations on Choresmian silver bowls.<sup>47</sup>

A late Kushan-style gold dinar with the standing figure of a sacrificing Sasanian ruler marks an entirely different point of entry of Sasanian power into the territories of the waning Kushan empire (Plate 48, 23). Its style is distinct from that of the sacrificing king on the earliest of the three copper types treated above, and appears to have little connection with them. The finely executed figure wears Sasanian princely garb with full billowing trousers, fluffy tied beard and side curls. He wears a distinctive crown made up of a low, flat element surmounted by a wavy crest with a large fan-shaped configuration studded with pearls. He holds a sword in his left hand, and with his right appears to sacrifice at an altar which, again, differs from the usual Kushan type. 48 Beside the altar stands a ribboned trident similar to the type found on many later Kushan issues. 49 A Brāhmī akshara pi is located at his left elbow. The inscription on the obverse is in retrograde and almost illegible Kushan Bactrian, but has been recently interpreted by both Cribb and Lowick as Perozo košono šao (i.e., Peroz Kushānshāh).<sup>50</sup> The inscription, and indeed the unique dinar, appear to be of an extremely early and unusual type, without a place within any sort of sequence. For this reason it must be placed somewhere close to the onset of Sasanian dominance over Kushan lands. The sacrificing figure is a personage of high ranking Sasanian nobility, but is not a Sasanian king. No Sasanian king named Peroz existed until the fifth century in Sasanian Iran. The name Peroz, however, was certainly well known among princes of the early Sasanian period. The Kushan ruler's crested headdress appears to be of a type known to high nobility in Iran during the third century. Unlike that of the great king, such crowns were



<sup>&</sup>lt;sup>47</sup> G. Azarpay, "Nine Dated Choresmian Bowls," *Artibus Asiae* 31 (1969), pp. 185-203 and pls.

<sup>&</sup>lt;sup>48</sup> See Rosenfield, pls. 11-12. The altar of Väsudeva issues appears to have a heavy base, thick shaft, and triangular projections (crenelations?) on the top on either side. The issues of Kanishka II and Väsishka have three projections on top. The altar of the dinar in question may be similar to that of the Šaboro coppers.

<sup>&</sup>lt;sup>49</sup> The ribboned trident first appears on "long-haired Vāsudeva" issues (Rosenfield type III) almost directly above the altar. Here it is slightly to the left.

<sup>&</sup>lt;sup>50</sup> See Cribb, p. 93; Bivar, p. 47; also N. Lowick, "Some Thoughts on the Coinage of the Sasanian Kushānshāhs" (unpubl. ms., 1975).

without long diadem tails. Other ribbons, however, float out from the back of the Kushan ruler's harness. Obviously, this personage must have been a high official in the Sasanian court. The unusual headgear may be seen first on coin obverses in Fars, just preceding the Sasanian dynasty.<sup>51</sup> Similar crowns are also seen on early Sasanian silver plates, showing princely but not royal hunters, such as those found at Shemakha and Sari.<sup>52</sup> The Sari plate shows a hunting prince wearing a strikingly similar headdress made up of a diadem with a row of curls above it surmounted by a fan-shaped element tied at the base with a small ribbon (Plate 52, 45). This extraordinarily fine work depicts the hunter seated backward on his galloping steed while shooting a lion. Another lion lies dead under the horse's hooves in what may well have been to the Sasanians a metaphor for a military victory. The plate is somewhat dissimilar in style and size from others of the same era and is dated by Harper to the later decades of the third or early fourth century.53

The reverse of this Kushano-Sasanian dinar (Plate 48, 23) displays a close copy of a late Kushan Ardoksho reverse but with certain telling changes. The enthroned goddess with cornucopiae holds out, not the usual diadem of rule, but a Kushan royal helmet, undoubtedly indicating a victory over the Kushan king. The usual Kushan monogram is missing but on the left may be seen a symbol similar to that found on the reverses of the coppers depicting Bago Miiro.

Who could this Peroz have been? Certainly the name must have been common in Sasanian courtly circles. The only important royal Peroz of whom we have any knowledge from both the SKZ and from Manichaean literature is Prince Peroz, brother of Shāpūr I, who, in the SKZ, is duly recognized but has no kingdom of his own, as do Shā-



<sup>&</sup>lt;sup>51</sup> See F. D. J. Paruck, Sasanian Coins (Bombay, 1924), p. 51, pl. 1, fig. 2, with bust of Papak on reverse; also E. F. Schmidt, Persepolis 1 (Chicago, 1953), pl. 199A, graffito from Persepolis; also P. O. Harper and P. Meyers, Silver Vessels of the Sasanian Period, vol. 1 (New York, 1981), fig. 19.

<sup>&</sup>lt;sup>52</sup> Harper and Meyers (above, n. 51), pp. 48-49, pls. 8 and 10.

<sup>&</sup>lt;sup>53</sup> Harper and Meyers (above, n. 51), pp. 125 ff., for an interpretation of the chronological development of Sasanian royal imagery on silver plates. The exclusive royal usage of the hunting theme does not appear to have begun until the time of Shāpūr II (309-79).

pūr's sons.<sup>54</sup> This Peroz has been associated with the king of Tūrān, who supposedly espoused Manichaeism; and Peroz appears to have been Mani's supporter at the Sasanian court. 55 Although he is not mentioned as viceroy of any territory in the SKZ, his name is inextricably linked with the east.<sup>56</sup> It appears entirely possible that Prince Peroz played a part in Shāpūr's eastern campaigns and that, at some point in his life, he had the dinars struck to celebrate a victory over the Kushans on the borders of Gandhara. If we follow the date of the SKZ, Peroz could only have proclaimed himself "king of the Kushans" after 262, although he might easily have been a contemporary of the first of the Sasanian Kushānshāhs who ruled to the north. The coinage of the victorious Peroz could have been an evanescent episode on the Gandhāran frontier late in Shāpūr I's reign; yet it seems more likely to have been the beginning of another attempt to gain mastery over the bulk of western Kushan territories, similar to that of Ardashīr Kushānshāh whose base of power extended from Merv and western Bactria. The Kushan



<sup>&</sup>lt;sup>54</sup> W. B. Henning (above, n. 7), p. 46. He is "Peroz the Prince" (*BRBYT'*) vishpur, a title reserved for members of the royal house.

<sup>55</sup> Manichaean literature from Turfan testifies to Mani's missionary activities in Tūrān and to his conversion of the king of Tūrān. See W. B. Henning, "Neue Materialien zur Geschichte des Manichaismus," ZDMG 1936, pp. 6-7. Herzfeld (above, n. 28), 1, pp. 44-15, discussed the likelihood that Mani worked in the east under the protection of Prince Peroz. See also W. Sundermann, "Mani in India," in Proceedings of the International Conference of the History, Archaeology and Culture of Central Asia in the Kushan Period (Moscow, 1975), 2, pp. 153-57. See also Marquart (above, n. 26), p. 49. It cannot be assumed, however, that Peroz was a Kushānshāh when he helped Mani (A. Christensen, L'Iran sous les sassanides, 2nd ed. [Copenhagen, 1941], pp. 102 and 194-195). Prince Peroz arranged for Mani to attempt to cure the king's ill son, according to the Firhist.

<sup>56</sup> Sundermann (above, n. 55), pp. 154 56. Mani's activities in India have been calculated to have taken place between 241 and 242, where his missionary work was confined to areas subject to the Sasanians but still ruled by vassal kings, i.e., the Indus Valley, Makuran, and Tūrān. The king of Tūrān who converted was still on the throne in 242, and Shāpūr I had not yet mounted his eastern campaign to directly control the regions under the Sakanshāh. The coin reverses of Ardamitra showing the throne-altar of Ardashīr I are probably not emblems of his conversion to Manichaeism, but more likely of his submission to Ardashīr I. It is notable, however, that the throne element on the reverse does not have the elaborate lion legs of the Sasanian throne on Ardashīr's drachm reverses. See Mitchiner (above, n. 8), pp. 771–73, and Harper and Meyers (above, n. 5), p. 104 and fig. 29.

defeat by Peroz could have been suffered by Kanishka II who ruled for about twenty years following Vāsudeva I, or more probably Vāsishka who reigned immediately after Kanishka II.<sup>57</sup>

One might expect that this coin represents no more than an aberrant episode, isolated at the beginning of the development of Kushano-Sasanian coin types, were it not for another exceedingly rare heavy copper (6.2 g) first noted by H. H. Wilson many years ago, with another example recently discovered by Cribb.58 Its obverse shows a typically Sasanian princely bust of third-century style with fluffy beard and hair, wearing a low, flat crown edged on top by a row of curls (Plate 47, 4). There is no indication of a plume above, but the name of Pirozo (more like Porozo) again appears, making it likely that this copper belongs to the same ruler. The crown worn by the princely hunter on the Sari dish has similar curls. On the reverse (Plate 47, 4) we find a narrow-shafted altar with a superimposed throne resembling that of Ardashīr I and, more closely, the throne-altar found on the reverse of Tūrān copper issues of the "Ardamitra" type which probably indicated a vassal status under Ardashīr I (Plate 50, 46).59 Like the Tūrān issues, the throne legs of the Peroz coppers appear to be of a simple type, not the bowed lion legs seen on the first royal Sasanian issues; and thus they may indicate Peroz Kushānshāh's less exalted status.60 A most important change has taken place in one element of this reverse, however, which was to be repeated on reverses of heavy Kushano-Sasanian copper types from that issue on: the flames of the fire altar have been



<sup>&</sup>lt;sup>57</sup> The hypothesis that Shāpūr I was active in south Afghanistan is corroborated by the fact that the coins of Ardashīr I are rare there, but those of Shāpūr I are common; see Wilson (above, n. 11), p. 383; Mitchiner (above, n. 8), p. xix, note 916. Vāsishka, son of Kanishka II, ruled between approximately 120 and 140 of the Kanishka I era. His two inscriptions date to (1)24 and (1)28 at Mathurā. Kanishka III was on the throne by (1)41 according to the Ārā Inscription; see Cribb (above, n. 5), pp. 106-8. It is possible that Kanishka II ruled until between 245 or 250. Thus his fall might have been related to Shāpūr's invasion of the Kabul Valley at that time. Vāsishka would have been left with his frontier against the Sasanians in Gandhāra (see Appendix).

<sup>&</sup>lt;sup>58</sup> Wilson (above, n. 11), pl. 17, p. 403, no. 39. The coin illustrated was recently added to the collection of the British Museum, where it was recognized by Cribb as the same type illustrated by Wilson.

<sup>&</sup>lt;sup>59</sup> See above, n. 56. Only flames appear on the Ardamitra altar.

<sup>60</sup> See Harper and Meyers (above, n. 51), pp. 99-122.

replaced by the frontal bust of a nimbate deity with a crescent on top of her head. Her name, clearly printed in Bactrian above, is Bago Nano, the goddess Nānā, in a formula immediately recalling the copper reverses with Bago Miiro. The identity of the bust on the altar appears to change with later issues, and remains mysterious; but here in what must have been the first bust-on-altar reverse image, the prototype of all others (including those of later Sasanian reverses), the identity is unmistakable. Like Miiro, Nānā was widely repeated on Kushan reverses as a standing figure wearing a lunar crescent and holding a wand with an animal protome. She is identified on Kanishka and Huvishka coins as Nānā, Nanaia, or even Nanoshao, but never as Bago Nano, which again indicates a change in emphasis on the part of the Sasanian conquerors of Kushan lands. The representation of Nānā on the throne-altar in place of the sacred fire may signify a large degree of autonomy on the part of the ruler Peroz.

Far better known crown types also belonging to a Kushano-Sasanian ruler by the name of Peroz suggest a waxing of Peroz's fortunes, or a sequence of rulers by that name. Thus the Peroz of the curl-topped crown will be designated Peroz A, and the others B, C, and D (see Table 1). The next Peroz issue, on copper type B, is also of a similar, thick, rather heavy fabric (3.6 to 4.4 g) but lighter than type A (Plate 47, 5).62 On the obverse we find a princely profile bust with bushy curls and tied beard wearing a higher but still flat-topped crown made up of an arcade pattern below a row of large pearls. Clearly visible in front of the profile is ozo šao, most probably (Por) ozo in a simple, nonligated Bactrian script. The reverse shows an altar-throne combination with bust, but one significantly changed from type A. The shaft of the altar has become thicker and the throne has large side ribbons and



<sup>61</sup> Rosenfield, pp. 83-91 (also Šaonano). The addition of šao indicates a royal nature and a special identification with royalty. No doubt this played a part in the device of setting a bust of the goddess on the fire altar in place of the Sasanian royal fire. Again the use of bago, an apparently non-Zoroastrian epithet in Sasanian times but one used in the east (Bactria, Sogdiana, and possibly Tūrān) and by Manichaeans, is most interesting (see n. 38) and may indicate the influence of local religion. Probably Peroz himself was a Manichaean, or at least favorable to the religion. Nānā (Nahānahā) in Manichaeism is identified as the Mother of Life; see F. Legge, Forerunners and Rivals of Christianity, 2 (London, 1914), pp. 300-301, n. 2.

lion legs much like the throne of Varahran II depicted on the rock relief at Nagsh-i-Bahram. On top of the throne-altar of B we find once more a bust, but this time of a personage with long, straight side locks, no visible ornament on the head and, interestingly enough, no nimbus. Obviously the image is not the same as that of the former type. A partial inscription, very difficult to read, seems to be ...oo borzo, although this is extremely tentative. A variation of this reverse, which seems to have had a fairly long popularity, shows a similar throne-altar with the frontal bust of a personage with typically princely Sasanian hair clumps on either side of the head (Plate 47, 6). On the obverse the profile bust and crown have been modified somewhat, showing Peroz with a more distinctly areaded crown with pearls and hair in more defined rows of curls. This hairstyle, like that of the final Ardashīr Kushānshāh, is similar to that found on Sasanian drachms of Varahrān I and II. A second reverse (Plate 47, 7) with a similar copper obverse shows Oesho-and-bull of the pre-Kushano-Sasanian proto-scyphate series and indicates the adoption of the alien imagery of the Kushans. These coins are rare and usually very worn.

An important unique silver drachm of Sasanian type exists showing the bust of Peroz with B crown (Plate 50, 37). This time we find a long Pahlavi inscription reading mzdysn bgy Pylwzy RB' kwš'n MLK', essentially the same as that of the Ardashīr Kushānshāh who minted coppers at Merv. 4 This coin too may have come from Merv or possibly Herat, since a similar Sasanian-type drachm minted by Peroz's successor Hormizd I Kushānshāh has the designation of Herat in Pahlavi on the reverse. 5 On the Peroz reverse, instead of the usual fire altar, we find the ruler standing on the left with raised hand above a small altar. Beside him is the inscription Pylwzy MLK'. The object of his adoration is an enthroned deity who appears to be flaming, and approximates the reverse imagery of the Bago Miiro of the earlier copper



<sup>63</sup> Harper (above, n. 31), p. 62, pl. 6, and Harper and Meyers (above, n. 51), pp. 99 101 and fig. 25.

<sup>64</sup> Bivar, pp. 21 and 31, no. 16.

<sup>65</sup> Bivar, p. 21, no. 17. Hlywy appears to be the Pahlavi mint name at 12:00 of the inner margin. Henning suggested to Bivar 'Hlhw (Hlhwly), an abbreviation of Arachosia, although it seems doubtful that a Sasanian style drachm with Pahlavi inscription would have been minted there.

type reverse. Bivar has accepted, with some reservations, the reading  $bwld'wndy\ yz(d)ly$  (at 4:00), which may be loosely translated as "great god" or "exalted god" in Pahlavi.<sup>66</sup>

This investiture issue brings the flaming Zeus-Mithra well within the Sasanian orbit. Whether we may translate the Pahlavi as "exalted god" or "revered divinity" the titulature seems to have been made deliberately vague, perhaps in an attempt to appease various religious elements in the population.

The Peroz or Perozes of crown types A and B appear to have created a kingdom of considerable breadth. The heavy coppers, which must have circulated somewhere in the region of Gandhāra, became the prototype for all Kushano-Sasanian heavy coppers to come, indicating firm and lasting control over this region. Additionally, however, Peroz at some time in his career as a Kushānshāh must have moved to the northwestern edges of the Sasanian borderlands controlling Merv or Herat, and perhaps both.

It is also with a Peroz (Perozo) Kushānshāh that we come to the end of the proto-scyphate gold sequence of coins of late Kushan type, which had probably circulated in large part in areas under early Sasanian or Kushano-Sasanian control. A unique Peroz gold scyphate coin in the British Museum marks the transition from the frozen "Vāsudeva" issues to the beginning of a long Kushano-Sasanian gold scyphate series (Plate 48, 24). This coin, which follows Rosenfield's proto-scyphate Vāsudeva Type V, displays the doll-like figure of the typical sacrificing ruler wearing armor with skirt and Kushan crown (C). He holds the usual trident next to the nandipada symbol in right field. Between his legs are a swastika and dot, with another dot between his leg and the small altar. The only real departures from the late Kushan norm are the Sasanian tied beard and hair ball indicated by a group of dots at the back of the head, and the Bactrian inscription which reads Pirozo oozorko Košono šaho.68 Between the left leg and the trident shaft is a



<sup>66</sup> Bivar, p. 31; Bivar (above, n. 37), pp. 746-47.

<sup>67</sup> Rosenfield, pp. 108-9, coins 229-32, pls. 11 and 12.

<sup>&</sup>lt;sup>68</sup> This inscription was read by Bivar, p. 28, as H(o)rmizd oozorko košono šaho, thus giving the coin to Hormizd I Kushānshāh. Robert Göbl reexamined the coin and changed the royal name to Pirozo (Peroz), although he believes the ruler to actually be Shāpūr II (*Iranischen Hunnen*, 1, pp. 17–21). Cribb, p. 94, also read Pirozo.

Brāhmī pi, identical to that which is found by the left elbow of the king in the unique Kushan-style Peroz dinar with Ardoksho reverse. On the scyphate reverse we find a similarly hybrid version of the proto-scyphate Oesho-and-bull motif, again marking the beginning of a standard reverse formula for Kushano-Sasanian gold scyphates from that time on. Like the royal figure of the obverse, the deity on the reverse has become bearded with a fiery thatch of hair atop his head, while retaining the Kushan sidelocks and nimbus which have degenerated into meaningless abbreviations. The god holds the usual trident and diadem, but is now dressed in a Sasanian tunic and loose trousers. Perhaps the most interesting change, however, is the replacement of the Kushan inscription Oesho with the Bactrian transliteration of the reverse inscription in Pahlavi of the enthroned flaming deity, which emerges as oorzoando (or borzoando) iazado, identical in meaning to the Peroz silver drachm. 69 Clearly, some sort of syncretism has taken place, expanding Oesho-Siva to encompass the Saka Zeus-Mithra or Bago Miiro. As I have pointed out elsewhere, this merging of deities, and indeed cultures, may well have been promoted by the Kushano-Sasanians to enhance internal stability. Thus a devotee of Oesho, Mithra, or Ohrmazd might have seen his own deity in such imagery.

The first Peroz scyphate with Kushan crown C appears to have been experimental and soon followed by another (D) showing the ruler in a more thoroughly Sasanian guise (Plate 48, 25). He is depicted in the usual sacrificing pose but has the full muscular torso of a Sasanian breastplate, short armored skirt, leggings, and sleeves. The face is more finely modeled with princely Sasanian beard and hair. One minor but telling addition is a crescent on the middle prong of the upright trident by the altar. A major distinction, however, is the crown which has become a lion-headed *kulah* of princely Sasanian type. The in-

<sup>69</sup> Harold Bailey first read the inscription as varzavand yazado ("Harahuna" in Asiatica [Festschrift Friedrich Weller] [Leipzig, 1954], p. 14, n. 21). Bivar notes the beth in the Pahlavi version, and the fact that the initial letter of the Bactrian inscription is either omicron or beta, making the reading more accurately borzawand, which he translates as "having miraculous power" (above, n. 37), pp. 746-47. Siva is commonly called mahadeva, which is essentially the same. OP Ahura Mazda is baga vazraka (see above, n. 38).



scription remains the same as that on type C. On the reverse the deity-and-bull have become even more Sasanian in character, with the hair treatment of the god depicted as heavy round bunches of curls on either side of the head. The inscription remains, as it will for the rest of the similar reverses, borzoando iazado, with some variations.

Since the last crown type (D) also belongs to a Peroz, it may be that we have a final change in headgear of one ruler, or possibly another succeeding ruler by the same name, in a closely related series. Whoever this Peroz may have been, his adoption of a royal Sasanian lion-headed kulah must be considered as an iconographic change of great importance. The first time the Sasanian lion-headed helmet is seen in Sasanian imagery is at Firuzabad on the great equestrian victory relief of Ardashir I over Artabanus V. Early drawings show the now obliterated helmet of the crown prince Shāpūr (later Shāpūr I) to have been a lionheaded kulah.<sup>70</sup> A prince to the right of the Sasanian king Varahrān II, on his Nagsh-i-Rustam relief, wears a lion-headed kulah, as does the prince to the left of Narseh on his investiture relief at the same site.<sup>71</sup> This evidence suggests that princes close to the throne (perhaps Sasanian heir apparents) favored the lion-headed kulah. Could it have been possible that this Peroz Kushānshāh saw himself as a prince royal or heir to the Sasanian throne? Certainly no king by the name of Peroz reigned during the third or fourth centuries; so, if this is the case, he was disappointed in his efforts. We know of two times during the early Sasanian period when dynastic strife prevailed in the transition from one king to the next, although there may have been others. The first occurred between the reigns of Varahrān II and Narseh in 293 when



<sup>&</sup>lt;sup>70</sup> See G. Herrmann, *The Iranian Revival* (Oxford, 1977), pp. 88-89, reproducing a drawing by Eugene Flandin from his *Voyage en Perse* (Paris, 1843-47).

<sup>&</sup>lt;sup>71</sup> See Ghirshman (above, n. 31), figs. 212-13. Here the cap is difficult to see due to shadows. The Naqsh-i-Rustam relief shows the standing figure of Bahram II flanked by busts on either side. Bivar, *Prolegomena* (above, n. 1), p. 326, tentatively identified the busts on the left as Queen Shāpūrdukhtāk, his son the future Varahrān III, and Hormizd Kushānshāh in a lion cap. Since the lion-headed *kulah* wearer of Kushano-Sasanian coins is recognized as Peroz, this could not be Hormizd Kushānshāh, although it might be Hormizd Sakanshāh, who was a distinctly different ruler. As to the Narseh relief, the prince to the left of the king wears a *kulah* with an animal head holding a pearl in its mouth. Possibly this is not a lion but a bird, emblem of the future Sasanian monarch Hormizd II; see R. Frye, *The Heritage of Persia* (Cleveland and New York, 1963), fig. 78.

the throne was disputed between Varahrān's son, the Sakanshāh, who became the ephemeral Varahrān III and reigned only a few months, and his great-uncle Narseh, the elderly son of Shāpūr I.<sup>72</sup> A king of the Kushans appears to have been mentioned as a partisan of Narseh's on the Paikuli inscription, although his name is illegible and he does not seem to have been important.<sup>73</sup> The second crisis took place after the death of Hormizd II in 309 when a dominant faction at court made the infant Shāpūr II king.<sup>74</sup>

In a light copper series of issues belonging to Peroz C and Peroz D, the imagery closely imitates that of the scyphates. The first shows a sacrificing king wearing a Kushan helmet (Plate 47, 8). The second shows a more Sasanian-looking figure in the sacrificing pose wearing a lion-headed *kulah* (Plate 47, 9). Both show the deity-and-bull reverse with the usual inscription.

The Kushānshāh who followed Peroz inherited a Kushano-Sasanian kingdom built up by his predecessor (or predecessors). Hormizd I Kushānshāh took the lion-headed *kulah* of the previous ruler as his own crown, adding to it a large lotus bud and long-tailed diadem with



<sup>&</sup>lt;sup>72</sup> Gagé (above, n. 27), Appendix, "La crise royal de 293," pp. 379-86. See W. B. Henning, "A Farewell to the Khagan of the Aq-Aqataran," *BSOAS* 14 (1952), pp. 501-2; also Frye, (above, n. 27), pp. 314-16.

<sup>73</sup> The list is composed of princes and rulers loyal to Narseh from various locations, some actually within the Sasanian Empire. It includes a king of the Kushans whose name was tentatively read by Frye as Zamasp (above, n. 27), p. 322. Later he doubted this reading ("Remarks on the Paikuli and Sar Mashad Inscriptions," Harvard Journal of Asiatic Studies 20 [1957], p. 702). It would seem that if there were a Zamasp or other such "king of the Kushans" on the Paikuli inscription, he was not a Kushano-Sasanian ruler, but a Bactrian viceroy loyal to Narseh, perhaps placed there by Varahrān II after his conquest of 285. He would not have issued coins. M. L. Chaumont finds no evidence that the Kushans were among the Sasanian vassal states during the third century. She is right, in a sense, since the Kushano-Sasanian rulers asserted their independence very early and by the time of Narseh were virtually autonomous; see Chaumont (above, n. 4), p. 123–29. From the time of Narseh until the majority of Shāpūr II the Kushano-Sasanians were a powerful rival to Sasanian power in the east.

<sup>&</sup>lt;sup>74</sup> See Nöldeke, *Tabari* (above, n. 4), p. 51, n. 3. See also A. Christensen, (above, n. 55), pp. 233-35. Supposedly a son of Hormizd II, Adhur-Narseh took the throne immediately after Hormizd's death, but was deposed within a few months. Another of his sons was blinded, and a third also named Hormizd was thrown into prison, only to escape later to the Romans.

ends floating upward. His gold scyphates resemble those of Peroz D except for the proportions of the sacrificing ruler, which are heavier and more squat in most cases (Plate 48, 26). The Bactrian inscription on Hormizd's obverses announces him as "great king of the Kushans," except in his Balkh issues (with Baxlo clearly rendered at 4:00) where he styles himself oozorko košono šahonanošaho (great Kushan king of kings) indicating feudatory territories under lesser rulers and a position no less exalted than that of the Sasanian king of kings (Plate 49, 27).<sup>75</sup> The Balkh issues show the trident with crescent-topped middle prong, which may possibly signify that city. If so, the similar trident and crescent on Peroz scyphates may indicate the same mint city. In addition, the Balkh issues lack the usual nimbus around the ruler's head and occasionally have an X over the nandipada sign in the right field. Hormizd I scyphate reverses continue the deity-and-bull motif with the usual Bactrian inscription, following the precedent of Peroz D.

The reign of Hormizd I Kushānshāh must have signaled the optimum expansion of the Kushano-Sasanian Empire, and also a period when it was at its most independent from the central dynasty in Iran. The large lotus bud, traditionally the symbol par excellence of solar deities in India, and here most probably of Mithra (i.e., Bago Miiro), may imitate the royal Sasanian korymbos or covered hair globe above the crown. The long-tailed diadem also emphasizes the independent royal nature of Hormizd I. This ruler evidently did not consider himself a vassal to Iran in any sense, and openly proclaimed his allegiance to a native solar deity with his lotus bud crown.

Sasanian-style gold dinars were also issued by this Hormizd. All show, in good Sasanian tradition, the royal profile bust with lion-headed lotus kulah, but short diadem tails (Plate 51, 28). The Pahlavi inscription is mzdysn bgy 'Whrmzdy RB' kwš'n MLK' n MLK'.77 The short tails of his diadem may this time belie his title as king of kings, although the Kushānshāh may have been more circumscribed in his



<sup>&</sup>lt;sup>75</sup> Herzfeld (above, n. 1), p. 11; also Bivar, pp. 17, 29 no. 7.

<sup>&</sup>lt;sup>76</sup> Carter (above, n. 39), pp. 76–98. Mithra is shown standing on the Cosmic Lotus in the relief of Ardashīr II at Taq-i-Bustan, which shows the influence of Kushano-Sasanian imagery on the main dynasty in Iran in the period directly following the reign of Shāpūr II (379–83).

<sup>77</sup> Bivar, pp. 22 and 31, no. 18.

choice of imagery when closer to the heartland of the Sasanian monarch. Although all of the obverses are identical, there are three known reverse types. The first shows a standing image of Hormizd facing a beribboned fire altar with raised hand to receive a ribboned ring of investiture from a patron deity who is shown as a bearded male with a radiate spiked nimbus in Sasanian costume holding a sword, and who may be identified without doubt as Mithra (Plate 51, 28). A Pahlavi inscription repeats the name of Hormizd as king of kings and the name of the mint city, Mery, is clearly written above the ribboned fire altar. A second type, illustrated by Mitchiner, has a similar reverse except that the deity is less recognizable and does not appear to have a spiked nimbus.<sup>79</sup> A third drachm reverse is close to that of the singular Peroz B drachm. This time the king stands before a small altar paving homage to the representation of the flaming Zeus-Mithra (Bago Miiro).80 Again, as with the two previous reverses, the name Merv appears directly at 12:00.

From these fine and well-struck issues two conclusions may be reached. First, Hormizd controlled Merv, and thus possibly a good-sized portion of the Sasanian northeast borderlands of Khorāsān. Secondly, on his Sasanian-style dinars, which were undoubtedly investiture issues, he appealed to diverse population groups with different religious and iconographic backgrounds. He is thus invested by a recognizably Sasanian Mithra, a Zeus-Mithra, and a third unidentified deity. In Iran, Mithra investiture reverses appear on drachms of Hormizd I; but Hormizd I cannot possibly be identified with Hormizd Kushānshāh since he is mentioned in the SKZ (in 262) as king of Armenia, and he became king of the Sasanian Empire shortly thereafter. Investiture reverses with deities occur through the reign of Varahrān II and are usually shown with the ribboned altar shaft. With the reign of Narseh



<sup>&</sup>lt;sup>78</sup> Bivar, pp. 22 and 31, no. 18.

<sup>&</sup>lt;sup>79</sup> Mitchiner (above, n. 20), p. 201, no. 1270.

<sup>80</sup> M. I. Mochiri, Étude de numismatique Iranien sous les Sassanides et Arabe-Sassanides, 2 (Teheran, 1977), pp. 78-92, and fig. 126. This is almost identical to the Peroz I and Hormizd I Kushānshāh drachm reverses.

<sup>81</sup> See Henning (above, n. 7), pp. 411-45.

the ribbons around the altar shaft became a regular feature of standard drachm reverses.82

A Sasanian-style silver drachm was also issued by Hormizd I Kushānshāh. This shows a different handling of the bust, with the hair treated in more emphatically rowed curls, a pair of diadem tails floating out behind the crown, and the lapel of the coat fastened by a brooch (Plate 50, 38). A Pahlavi inscription again announces Hormizd as Kushan king of kings and recurs on the left of the reverse which shows Hormizd worshiping, with a gesture of adoration, the enthroned Zeus-Mithra, while holding a simpulum in front of a small hourglass-shaped altar (Plate 50, 38), as seen before on the Hormizd dinar and Peroz drachm reverses. The inscription on the right is bwrz'yndy yzdly, again the "great god" or "exalted god" of the Bactrian scyphates.83 This time at 12:00 beneath the outer inscription, there is a mint name, tentatively identified as Herat, which seems a likely possibility due to its proximity to Mery.84 Thus, it would appear that Hormizd I Kushānshāh held both Mery and Herat as part of a large Kushano-Sasanian empire, minting gold in the form of both Sasanian dinars and Kushan gold scyphates, Sasanian style silver drachms, and, as we shall see, a heavy and light copper series.

Hormizd I Kushānshāh minted light coppers, all approximately 2.2 to 2.4 g. On the obverse of all of these may be found the usual Hormizd bust with long-tailed diadem, but with a variety of small symbols at 10:00 between the diadem tails and lotus bud (Plate 47, 10, 11 and 12). These signs include a crescent, one dot, two dots, a crescent above three dots, or a symbol made up of a crescent attached to



<sup>82</sup> See Göbl, table 4, pl. 4, nos. 67-70, pl. 5, no. 71. Investiture reverses continued through the reign of Varahrān II until 293, although Varahrān's utilize a goddess (Anāhitā) or his queen. A change occurs in the drachm reverse of Narseh. The figures on either side of the altar face each other holding swords upright. This may have originally been thought of as an investiture as well, since the shaft of the altar is ribboned. This feature, however, quickly becomes conventional.

<sup>83</sup> Bivar, p. 21, n. 2, p. 31, no. 17. The complete obverse inscription is mzdysn bysn bgy 'whrmzdy RB'kws'n MLK'n MLK; the reverse on left is whrmzdy RB' kws'n MLK'n MKL'.

<sup>&</sup>lt;sup>84</sup> The inner top margin inscription appears to be *Hlywy* (see above, n. 65). Bivar's reading is based on the supposition that the engraver failed to reverse the back three characters on the die which are thus back-to-front on the coin.

a flat bar by a vertical shaft with two dots below it.85 One copper type (a), which has the inscription 'whlmzdy || MLK' on the obverse, shows him again on the reverse before the enthroned flaming deity, as seen on the Herat drachm (Plate 47, 10). A second type (b) has the deity-and-bull reverse (Plate 47, 11). A variant of this type has an enlarged inscription 'whlmzdy RB' || Kws'n MLK'.86 The third type (c), with a completely new reverse, shows a nimbate bust with arms emerging from the top of a tall altar tied around the middle with a long-tailed ribbon (Plate 47, 12). The bust holds a staff or spear in the left hand and a ribboned ring of investiture in the right. Bivar believes that the reverse inscription is still bwrz' yndy yzly, but this is problematic since the personage wears a flat-topped crown similar to those of Peroz A and B.87 The altar is unusual in shape, unlike both Kushan and Sasanian types in that it slopes outward to a flat top and is without a plinth. This last reverse type of Hormizd I becomes the sole reverse for light coppers with Pahlavi inscriptions until the end of the series.

We must now pick up the thread of development of the heavy, thick, rather dumpy and often carelessly struck coppers with Bactrian inscriptions which appear to have circulated in the Gandhāra region. Precedents for these issues are no doubt the Peroz heavy copper types, and they continue to use the bust on throne-altar reverse exclusively. Innumerable coins of this crude style show on the obverse a bust with lion-head *kulah*, or with lion-head *kulah* and lotus bud. None, however, names either kings Peroz or Hormizd as one might expect, but rather Kabod or Kobod (Sasanian Kavad) and a name, until recently undeciphered, which Cribb has rendered as "Meze" (which may relate to the name Hormizd). 89



<sup>&</sup>lt;sup>85</sup> The significance of these symbols can only be guessed. Some Shāpūr II drachms have a Pahlavi "H" behind the crown, which Mitchiner suggests indicates the Herat mint, p. 158, no. 875).

<sup>86</sup> Bivar, p. 33, nos. 25b-27b. No. 26 is given as 'whrmzdy.

<sup>87</sup> Bivar, p. 33, no. 27.

<sup>&</sup>lt;sup>88</sup> These issues correspond to the 4-6 g units of the later Kushan kings (see Mitchiner, p. 459, nos. 3521-25, p. 460, nos. 3526-36, which are copper issues of Väsishka and Väsudeva II). Probably these were meant to substitute for this unit after the fall of Gandhāra.

<sup>89</sup> Cribb, p. 91.

The issues of Kavad are the heaviest and best struck and probably follow directly the Peroz issues of crown type B. The hair, however, is not treated in the relatively fluffy manner of Peroz B but in swept-back curl strands (Plate 47, 13). The bust wears a lion-head kulah, above which a lotus bud may or may not be seen. One coin obverse has a lyre-shaped symbol on a footed bar in front of the profile. The name appears in an easily recognizable Bactrian script in front of the bust. On the reverses the altar is of a squat, heavy type with a cabriole throne leg (lion leg?) summarily indicated. One form of altar on Kavad reverses has two steps at the base and top and a vertical band on the altar shaft (Plate 47, 13). Another has only a single plinth as the altar top and a dot in the middle of the shaft; and the lyre symbol appears on the altar shaft of some of these simpler altars. On top of the altar-throne is a frontal bust, but so crudely done as to be unrecognizable.

Of the so-called "Meze" issues, some have a similar profile bust with lion-head *kulah* and lotus, although this feature is not apparent in more degenerate examples (Plate 47, 14). The throne-altar on the reverse is of the unstepped variety with rudimentary frontal bust. On the altar shaft is the Gondopharan symbol. These coins are generally even cruder and lighter than the Kavad ones and appear to follow them directly.

It has been generally agreed that Kavad and his successor were Kushano-Sasanian governors in the Gandhāra region under the authority of the monarch whose portrait appears on the obverse of their issues. The governors were allowed only their names on the coins, and did not mint either silver or gold. The economy of the region, it would seem from coin hoards, was kept going with masses of these crude coppers. The Kushano-Sasanian kings who wore the lion-head kulah and lion-head kulah with lotus bud were Peroz D and Hormizd I, respectively. Possibly Kavad began his governorship of Gandhāra late in the rule of Peroz of crown D and continued under Hormizd I. This might explain the lack of lotus element on some of the coins,



<sup>&</sup>lt;sup>90</sup> This may be a variant of the Gondopharan symbol or a precursor of the Hephthalite sign (see Göbl, *Iranischen Hunnen*, 4, pl. 15, nos. 61a-d).

<sup>91</sup> See Cribb, p. 94 (a reverse).

<sup>92</sup> I disagree with Cribb that this type (c) is a stepped altar. See Mitchiner, p. 203, no. 1295.

although it is also equally possible that the lack of the lotus element on the crown is due to careless striking of the coins off the flan. In any event, none of the lion-head *kulah* issues has the name of Peroz, and all seem to follow the Peroz B coppers in the Gandhāra region.

Bivar has stated that he has found one Peroz heavy copper type bearing the name of Hormizd; if this is true, possibly Hormizd I Kushānshāh began his career with a brief period of rule in Gandhāra. It must be assumed that, with the occupation of Gandhāra by the Kushano-Sasanians, confrontations must have occurred with the waning Kushan empire. Explicit evidence of this has been recently discovered in overstrikes of Gandhāran Kavad coppers by a Kushan king Vāsu (Plate 50, 47). This mysterious Kushan ruler belongs to the very last manifestations of Kushan power. His coins follow the usual formula of Brāhmī inscriptions and Ardoksho reverse (Plate 50, 48) but, perhaps significantly, do not repeat the usual stylized sacrificing king motif, using instead the representation of an enthroned ruler, seen frontally, holding a staff in his left hand and a ring of office in his right. 95

Cribb would make this Vāsu in his chronology Vāsudeva II, who must have ruled after Kanishka III of the year (1)41 Ārā inscription. If we may assume that the second century of Kushan chronology follows the first (omitting the hundred) as Van Lohuizen-de Leeuw has convincingly reiterated with new inscriptional evidence from Gandhāra,



<sup>93</sup> Bivar, Prolegomena (above, n. 1), p. 321, and Corpus Inscriptionum Iranicarum: part 3, vol. 6, Pahlavi Inscriptions—Coins and Seals (London, 1968), pl. 4, no. 10; hereafter cited as CII.

<sup>94</sup> See Cribb, p. 104. For the Vasu coin type see Rosenfield, p. 113, and pl. 12, no. 247; Mitchiner, p. 464, nos. 3568 69. The copper coin is of the same denomination as the Kushano-Sasanian Gandhāran issues.

<sup>&</sup>lt;sup>95</sup> Rosenfield compares the frontal enthroned king to a similar image on the rare copper issue of Kanishka I (pl. 2, no. 39, pl. 3, no. 40). This seems remote. The frontal images of the enthroned Ardoksho and Nānā on coin reverses and the requisite image of the enthroned Sasanian monarch are perhaps closer.

<sup>96</sup> Cribb, pp. 104-5. He is right in maintaining that the Vāsu overstrikes on Kavad coppers make this Kushan ruler a probable contemporary of Hormizd I Kushānshāh. What is not clear, however, is whether Vāsudeva II, who ruled after (1)11 of the Kushan Era, is the same as Vāsu. According to Mitchiner, the dinars of Vāsudeva II have the name *Bazodeo* on the obverse (p. 458, nos 3504-6), while there is a separate series with a corrupt Bactrian inscription belonging to a Vāsu (p. 463, nos. 3512-50). These have the *akshara VaSu* in the right field on the obverse.

Kushan power must have been in the last stages of disintegration some 160 years after the beginning of the Kanishka era. (See Appendix 1). After the year 57 of the second century no more Kushan dated inscriptions are found at Mathurā. At this point a fragmentation seems to have occurred lasting several decades, during which time small principalities probably existed minting autonomously in the tradition of the vanished empire. The Vāsu issues may have belonged to the beginning of this era and to an independent or semi-independent ruler who possibly engaged in a border war with Kavad of Gandhāra.

100 The question of the succession of Kushan rulers after Kanishka III (ca. 141 KE I) is basically unsolved. It is likely that this king did not remain in power until the fall of Mathurā (ca. 160 KE I) but was succeeded by another Vāsudeva, whose coins follow his typologically. It is uncertain whether this Vāsudeva II is the same as Vāsu, or whether we have a Vāsudeva III here. One important feature of the Vasu "seated ruler" coppers is the placement of the aksharas: a va between the legs and a



<sup>97</sup> See above n. 5; also J. E. Van Lohuizen-de Leeuw (above, n. 11).

<sup>&</sup>lt;sup>98</sup> For the Mathurā inscriptions of the first and second Kanishka Eras, see Rosenfield, appendix 3.

<sup>99</sup> If Mathurā was lost approximately 160 years after the beginning of the Kanishka Eras (I plus II), the remaining realm of the last of the Late Kushan rulers was reduced to an area bounded by the Indus (with Taxila on the western border contended for by both Kushans and Kushano-Sasanians) and comprising at least a portion of the Punjab. The lands on its eastern borders were controlled by such peoples as the Panchalas of Ahichattra, the Yaudheyas of Rohtak, and the Nagas of Narwar. This muddled period produced the gold dinars inscribed with names of Shaka, Kipanada, Mahi, Gādahāra, and Gādakhāra. It is beyond the scope of this investigation to unravel the tangled political events of this period, although it appears that the Kushan-style dinars of Kidara and the Kidarites follow this series. The Gādakhāra dinars, however, are most interesting since they show on the obverse a ruler dressed in a Sasanian costume and crown sacrificing at an altar with a trident topped by a crescent (an emblem found on Kushano-Sasanian scyphates possibly originating at Balkh). Somehow this particular ruler had or aspired to Sasanian or Kushano-Sasanian connections; see Mitchiner, pp. 467-70, and especially nos. 3599 3601. The Gādakhāra dinars are also notable for the Brāhmī inscription SaMuDra on the right under the ruler's arm. This must indicate Samudragupta, who probably made wide encroachments in Kushan regions ca. 350, as noted in his Allahābād Inscription. He received homage, according to this inscription, from the "daivapulra shahi shahanushahi saka murunda," a title that may include the last of the Kushans, along with related Saka and Murunda rulers; see J. F. Fleet, Corpus Inscriptionum Indicarum: Inscriptions of the Early Gupta Kings and Their Successors, 3 (Calcutta, 1888), p. 14. Whatever this titulature actually indicates, it is likely that it marked the final demise of the Kushan Empire. Anything remaining must have been finished off by the Kidarites.

Although the unsolved chronological problems surrounding the Vasū overstrikes make them relatively unhelpful in anchoring Kushano-Sasanian chronology, they do show that the Kushans and Kushano-Sasanians engaged in confrontations, and that the Kushans may have carried out successful campaigns against the new governors of Gandhāra, or at least measured their hold on the region from time to time.

Following the reign of Hormizd I Kushānshāh there seems to have been a rapid decline in Kushano-Sasanian power, precipitating a split between Bactria and Gandhāra. The ephemeral Kushānshāhs, Peroz II and Hormizd II, are known from a fairly small number of coins. Which Kushānshāh came first is problematic, but it seems fairly certain that one succeeded the other. The better-known king through his issues and probably the more powerful is Peroz II. For this reason it seems likely that he succeeded Hormizd I. The crown of Peroz II is made up of a low flat basic shape, with a very large crescent emerging from its top. From between the arms of the crescent, a large lotus bud emerges, although in some instances this form begins to appear more like a striated globe. Like Hormizd I, Peroz II issued Bactrian inscribed scyphate dinars, although on a much more limited scale since only two examples are known. On these Peroz is shown in the usual image of the sacrificing king. On his shoulders, however, instead of the usual flames, are buds or striated globes like those seen on the costume of Hormizd II in an equestrian battle rock relief at Nagsh-i-Rustam.<sup>101</sup> In addition to the usual formula of dots, swastika, and nandipada, two differing Brāhmī aksharas appear on the two known examples of the coin. One, in the Kabul Museum, has a Brahmi pi. 102 The second (Plate 49, 29) has a Brāhmī śa or śo, which, if it is a name and not a place that is indicated, could be Soboro or Saboro, and suggests a new dimension in the relations of the Kushānshāhs with the

ga on the right under the king's arm. There is at least one gold dinar of the Vāsu type that has the same arrangement of aksharas and is distinct from the dinars of Vāsudeva II (see Mitchiner, p. 463, nos. 3517-48).



<sup>&</sup>lt;sup>101</sup> See Ghirshman (above, n. 31), fig. 220; Herrman (above, n. 70), p. 100. See also Ghirshman, figs. 165 and 195, for the Firuzabad Relief and the Bibliothèque Nationale Cameo.

<sup>102</sup> CII, pl. 6, no. 1.

central Sasanian dynasty.<sup>103</sup> The inscription designates Peroz II as simply bago Pirozo oozorko košono šaho or "great king," no longer "king of kings," in what may be a tacit admission of loss of power.<sup>104</sup> On the reverse we find the usual "exalted god" image and inscription.

Peroz II is also represented on both light and heavy copper issues. The light coppers with Pahlavi inscription show a well-defined bust of the king wearing his characteristic crown with long-tailed diadem. On the reverse is the ubiquitous armed bust emerging from an altar with a dot on its shaft (Plate 48, 15). The heavy coppers show a crude bust with a flat crown, small crescent and bud or globe, and again the mysterious inscription interpreted by Cribb as "Meze," which would seem to indicate that the same individual who had governed Gandhāra under Hormizd I in the later part of his reign also continued in office under Peroz II (Plate 48, 16). The equally crude reverses of these coppers show an unstepped altar-throne with bust.

There are no gold scyphates known for Hormizd II Kushānshāh, although he too may have minted a limited quantity. The Hormizd II crown again is based on the Peroz B type with a pair of wings above, like those of the Sasanian Varahrān II, behind an upright lotus bud. On his light coppers the inscription is 'whlmzdy MLK' (Plate 48, 17).<sup>106</sup> From the examples available, it seems that the diadem tails of the crown are short, rather than long, which may again have some significance relative to the Kushānshāh's loss of authority. His light copper reverses show an interesting variation in the imagery of the bust emerging from the altar. One type shows a bearded male without a nimbus but wearing a flat-topped crown topped by a row of pearls (Plate 48, 17), while another shows a similar bust surrounded by flames (Plate 51, 49). The first reverse seems to be left over from Peroz II light copper dies, and appears to be the flaming Zeus-Mithra-Oesho; but the second bust looks decidedly royal. This observation is not entirely surprising, since the deliberate conflation of royal with divine imagery is well known

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103 Mitchiner, p. 203, no. 1287.
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<sup>104</sup> Mitchiner, p. 203, no. 1287; Göbl, Iranischen Hunnen, 4, pl. 3, 7.

<sup>105</sup> Cribb, p. 95; Bivar, p. 35, no. 37.

<sup>106</sup> Bivar, p. 34, no. 22.

among both Kushans and Sasanians.<sup>107</sup> The heavy coppers of Hormizd again show a crude variant of the crown and the inscription "Meze," which would seem to suggest that this same personage remained as governor of Gandhāra under Hormizd II (Plate 48, 18).<sup>108</sup> Furthermore, as noted above, "Meze" may be some form of the name Hormizd, in which case Hormizd II might have been first, governor of Gandhāra under Hormizd I, then under Peroz II, and finally ruler in his own name for a short period of time. The reverses of Hormizd II heavy coppers repeat the debased altar-throne with bust.

At this point it is appropriate to treat the heavy copper issues of Gandhāran type exhibiting a bust of Shāpūr II. The heaviest and best struck of these do not seem to appear in the coin hoards treated by Cribb, and may have been issued somewhere outside Gandhāran territory, although not too far away. The heaviest of the Shāpūr II bust coppers weigh on average 4.0 g and correspond to the 3.8 to 4.0 g of the Kavad unstepped altar reverse variety. 109 Although the weight is similar, they appear to be slightly larger and thinner than the Kavad coppers and seem to be of a lighter-colored alloy. The obverse shows the unmistakable crown of Shāpūr II which has a row of pearls (sometimes curls) below its three crenelations and korymbos (Plate 48, 19). Long diadem tails are discernible, and the style of hair and features are close to those of Kavad, but also not far removed from Sasanian representations of the bust of Shāpūr II on his earlier issues. 110 Shāpūr, it should be remembered, came to the throne as an infant in 309, and thus an adult ruler bust of the most generalized type was created at that time for his coin portraiture. The name in Bactrian is clearly Saboro. On the reverse may be found a heavy stepped altar-throne with a circle with antennae (Gondopharan sign?) on the altar shaft.



<sup>107</sup> See Rosenfield, pp. 189-214. Ample evidence of Kushan solar divinization is found in the coin imagery of Vima Kadphises, who is shown as a bust emerging from clouds or rocky summits with flaming shoulders. As Rosenfield has demonstrated, the image of the sun god in Kushan sculpture becomes in many cases almost a twin of the ruler image. So, too, in Sasanian Iran the early rock reliefs show the king and the investing Ohrmazd on an equal footing.

<sup>108</sup> Cribb, pp. 94-95.

<sup>&</sup>lt;sup>109</sup> Cribb, p. 96.

<sup>&</sup>lt;sup>110</sup> See Göbl, p. 46. He notes the empty face and generalized features, the "dead eyes" of Type I.

On the altar, however, where the Kushano-Sasanians always placed a bust, is a simple rendering of flames.

A later group of copper coins of Gandhāran type displaying the bust of Shāpūr II appears to follow the sequence of Kushano-Sasanian governors of Gandhāra after Hormizd II, although it is possible that some are parallel issues. In Hoard 303 published by Cribb a full spectrum of Gandhāran Kushano-Sasanian coppers include a dozen of Peroz B, 119 of Kavad with Hormizd I bust, 267 of "Meze" with Hormizd I bust, five of "Meze" with Peroz II bust, one of "Meze" with Hormizd II bust, three of unknown type, 15 crude issues of a Kavad with a bust of Shāpūr II (2.52 to 3.84 g), and 101 very crude Shāpūr coins inscribed Šaboro with bust of Shāpūr II (1.75 to 3.65 g). Clearly, these later issues of Shāpūr II bring us into a new phase of relations between the Sasanian throne and the Kushano-Sasanians in Gandhāra. For an example of the crude Shāpūr II Gandhāran coppers with the Kavad (Kobod) inscriptions, see Plate 48, 20.

It would seem that after some initial movement toward the stronghold of Gandhāra early in Shāpūr II's reign, a second campaign on Shāpūr's behalf (or possibly by Shāpūr himself) brought Gandhāra under his control. Whether the later issues are simply a continuation of the first or separated by a hiatus of some years cannot be determined exactly. All that is certain is that, after the brief rule of the two last ephemeral Kushano-Sasanians of Gandhāra (Peroz II with "Meze" as his governor, and Hormizd II with "Meze"), the region came under the direct Sasanian rule of Shāpūr II. As for the reappearance of Kavad, if the name indicates the same personage previously noted, it would appear that he changed his allegiance from Hormizd I after losing out to "Meze," and returned under the banner of Shāpūr II to control Gandhāra once again. The tangled military and political affairs of this era, suggested by the decline in weight and quality of the coinage and the large numbers that seem to have been struck, will perhaps never be completely resolved. It is probable, however, that at a time early in the reign of Shāpūr II and contemporary with Kavad, governor of Gandhāra under Hormizd, a campaign was begun to regain Gandhāra



<sup>111</sup> Cribb, pp. 95-108 (hoard 303).

from Hormizd I Kushānshāh's empire and bring it directly under Sasanian control. Shāpūr II's early reign was a period of regency and consolidation, of which little is known. Princes loyal to the throne were given extra responsibilities within the Sasanian Empire at this time. Hormizd I Kushānshāh, building on the successes of Peroz I, held wide sway in the east on the empire's borders. Hormizd minted at both Merv and Herat; and one may imagine that relations between the central court with its infant king and the powerful, ambitious royal "cousin" were at times strained to the point of hostility.

A key to Sasanian strength over the northeast frontiers and Khorāsān are the issues minted at Merv. The earliest ruler to mint at Merv was Ardashīr Kushānshāh, followed closely by a reinstatement of royal power under Varahrān II around 285, following the suppression of the general revolt of the Sasanian eastern provinces led by Hormizd Sakanshāh. With the death of Varahrān II and the deposition of his son the Sakanshāh Varahrān III by the aged Narseh in 291, dynastic turmoil was briefly quelled. Narseh, however, was thoroughly preoccupied by wars with Rome which eventually proved disastrous to the Sasanians. His son and heir to the throne, Hormizd II, pursued a policy of appeasement with the Romans, and accomplished little militarily. As far as his eastern policy is concerned, Hormizd II seems to have chosen ties of marriage to ensure peace. Much is made of his taking a Kushan princess as a bride, although the rather late reference of Mirkhond is to the daughter of the "King of Kabul," who would have been most probably a Kushano-Sasanian princess related to the royal house of Iran, rather than a princess of the receding Kushan dynasty in the Punjab.<sup>112</sup> The "Kushan" ruler of Kabul could have been Peroz I Kushānshāh, or more probably Hormizd I. Another sign of the Sasanian Hormizd II's desire for harmony with the Kushano-Sasanians is his use of a drachm reverse similar to that created for Peroz I and continued on heavy coppers used by Hormizd I Kushānshāh's governors in Gandhāra. The Sasanian reverse shows a frontal bust in the fire on the altar

112 The Rauzal-us-safa of Muhammad bin Khavendshah bin Mahmud (Mirkhond), trans. E. Rehatsek (Delhi, 1982; reprint of 1892 ed.), 2, pt. 1, p. 340. There is no mention of the term "Kushan" in the text.



(Plate 51, 50). Later the bust turns to profile, in the manner of the light copper reverse armed busts of the Kushano-Sasanians.<sup>113</sup>

From the point of view of Sasanian history, the period encompassing Narseh's Roman wars, his ignominious treaty with the Romans, and Hormizd II's short reign, was one during which an autonomous and self-directed Kushano-Sasanian Empire was most likely to have arisen. With Narseh preoccupied with Rome, Peroz I Kushānshāh would have found the easternmost bastions of Sasanian power inviting targets. Herat fell to him, providing him with a mint for the first Kushano-Sasanian silver drachms. Merv may have held out longer, but was to become a mint city for Hormizd I Kushānshāh's gold dinars. By 310 and the period of regency for the infant Shāpūr II, the Kushano-Sasanians were probably in a position strong enough to become a serious threat.

Of the first two decades of Shāpūr's II's rule, we know little. We do know, however, that a new Sakanshāh, an older brother of Shāpūr II also named Shāpūr, was appointed and sent immediately to the east in 311. The Persepolis I inscription records the beginnings of his journey to his post, which may well have been to establish order and to subdue the Kushano-Sasanians with loyal troops from Sakastan. Thus, it is possible that some of the heavy coppers with bust of Shāpūr II that read Šaboro, most likely the best struck and heaviest of these, belong to this prince Shāpūr. These issues imitated in every way the Kushano-Sasanian ones, showing the bust of the ruling monarch with the name of the governor or would-be governor of Gandhāra, the Sakanshāh Shāpūr. The only difference in the imagery is the reverse altar-throne which supports flames rather than a human bust. Possibly a hiatus existed after the earliest Shāpūr II (Šaboro) issues. The Kavad of the debased



<sup>113</sup> Göbl, table 5, draws the bust-on-alter reverses as if they were all in profile to right or left. This is not the case, as may be seen in pl. 5, no. 80, which is a frontal bust, as opposed to no. 86, which is in profile. Under Shāpūr II, however, the profile bust-on-alter was the only version used.

<sup>114</sup> Herzfeld (above, n. 28), p. 121, pl. 50 (Persepolis I); H. S. Nyberg, A Manual of Pahlavi (Wiesbaden, 1964), 33, pp. 126-27; V. G. Lukonin, Kultura Sasanidskogo Irana (Moscow, 1969), p. 128, and (above, n. 1), pp. 17-18; R. Frye, "The Persepolis Middle Persian Inscriptions from the Time of Shapur II," in Iranian Studies Presented to K. Barr (Copenhagen, 1966), pp. 83-91.

later series may be the former Kushānshāh governor, or perhaps another loyal to Shāpūr II with the same common princely name. The last and most debased heavy coppers with Shāpūr II's bust and inscribed again Šaboro may belong to yet another Shāpūr who governed for Shāpūr II up to the collapse of Sasanian power in Gandhāra, which occurred around the middle of the fourth century.<sup>115</sup>

From the chronology gleaned from the Gandhāran hoards treated by Cribb, the relatively long reign of Hormizd I Kushānshāh, with Kavad and "Meze" as governors, was followed by ephemeral ones of Peroz II and Hormizd II Kushānshāhs with "Meze" as governor, lasting only a short period of time. By whatever means, Shāpūr II, still a youthful monarch and as yet unharassed by wars with Rome, took back Gandhāra from its Kushano-Sasanian governors which proved to be the downfall of Hormizd II Kushānshāh. This does not mean, however, that he controlled Bactria and the Kabul Valley which were held still by a Kushano-Sasanian dynasty.

Inscriptional evidence for the dates of the fourth century Kushān-shāhs from Karatepe on the Oxus, as interpreted by Harmatta, suggests that by 330 Varahrān I Kushānshāh was already ruling the Bactrian remains of the Kushano-Sasanian empire. Chronologically he follows the ephemeral Hormizd II. The Hormizd Kushānshāh referred to in another Karatepe inscription, dated before 330 as well, could possibly have been Hormizd II, but was most likely Hormizd I. If Varahrān I's rule began shortly before 330, it probably lasted at least eight years,

115 Shāpūr III is a possibility. He was the son of Shāpūr II and ruled from 383 to 388. Between his reign and that of his father came the enigmatic Ardashīr II, who may have been the brother or son of Shāpūr II, or possibly the son of Shāpūr the Sakanshāh. His rock relief at Taq-i-Bustan shows him with the god Mithra who stands on an obvious Indian lotus. Thus he may have connections with the east and the Kushanshahr, although there are no coins that give his name as a governor under Shāpūr II. He could not possibly be the much earlier Ardashīr Kushānshāh who ruled Bactria from Merv.

116 Harmatta (above, n. 29), pp. 123 24. See inscriptions nos. 20 and 17. The first has the date 397. According to Harmatta's calculations using his chronology of the Old Saka Era the actual date would be A.D. 330 (see Appendix). Inscription no. 17 mentions a Bago Oaroharano, "lord king Varahrān," who bears the same titulature as that appearing on Kushano-Sasanian coinage. Since this inscription appears to be earlier than no. 20, Harmatta concludes that Varahrān Kushānshāh I must have been ruling in Bactria by A.D. 330.



since the inscriptions also record than he visited the site of Karatepe again sometime shortly before 338.117

If we may postulate that the forces of Shāpūr II took direct control of Gandhāra around 330, a period of rule was established there under Sasanian governors Kavad and Shāpūr (Saboro) for about 15 to 20 vears. Mery, it may be recalled, was a mint city of Hormizd I Kushānshāh at the apogee of Kushano-Sasanian power. No Sasanian-type gold or silver issues have been found from Merv or Herat after this ruler, but there are a number of dinars and drachms of Shāpūr II that have a Mery mint mark. The finest and probably earliest of these are dinars bearing the generalized image of Shāpūr II on the obverse in a dense and detailed style with a standard reverse displaying the mint name Mery above the fire altar (Plate 51, 51). These dinars compare favorably with those of Hormizd I Kushānshāh in style and inscription and were probably struck not long after those of Hormizd, indicating that, early in the reign of Shāpūr II, Merv, Iran's strategic gateway to the Oxus and Bactria, was again in Sasanian control. The silver drachms of Shāpūr II struck at Merv, however, probably come somewhat later, since they are of a completely different style and show a more schematic and crude treatment of features of the bust. 118 One type has a crescent in front of the profile on the obverse (Plate 52, 52) and another shows two dots in a similar position.<sup>119</sup> On all of the examples noted so far, the reverse is a re-creation of the Ardashīr I type, the throne-altar with flames. Shapur II appears to have revived this reverse formula in a style close to the original. Possibly this reverse was minted exclusively in the east, or at least originated at the Merv mint under Shāpūr. To the left of the shaft of the altar the mint name Merv is found written vertically in Pahlavi. This numismatic evidence suggests that Mery was retaken perhaps even earlier than Gandhāra, and that it



<sup>117</sup> Harmatta (above, n. 29), pp. 123-24. The name of Oromazdo occurs on inscription no. 50 (see pp. 111-12). According to Harmatta, Varahrān I also left a second inscription (no. 49) at the caves which dates before 338. From the quantity of Varahrān I scyphates, it would appear that he may have ruled at least a decade in Bactria.

<sup>118</sup> Mochiri (above, n. 80), pp. 78-92.

<sup>119</sup> Mochiri (above, n. 80), nos. 128-29 (coins with two dots in front of bust on obverse; no. 130 (with crescent in front of bust).

remained a mint city for Shāpūr II over a long period of time. The Sasanian recovery of Merv must have taken place at some time between 310 and 330, most probably between 320 and 325.

The last series of scyphates with accompanying light coppers follows the format laid out previously. All of these belong to a ruler or rulers named Varahrān, a fact further complicated by the Kushano-Sasanian practice of using the image of the ruler with an accompanying inscription naming a satrap, governor, or sub-king. It seems unlikely that all issues bearing the name of Varahrān were minted by one single monarch, but rather two or possibly three. Moreover, the most degenerate and probably last of the scyphates that were minted in the Kabul Valley appear to be altered in inscription from Varahrān to Kidara, which could denote either a vassal position for Kidara and the Kidarites, or simply the hasty takeover of the local mint after Kidara's conquests, as suggested by the barbarous treatment of the reverses. 120

Among the Varahrān coin images, four crown types may be distinguished, with some variations (Table 1). The first two crowns, A and B, are made up of either two rows of large pearls, or an upright leaf zigzag motif under a row of large pearls, both surmounted by a large lotus bud (Plate 49, 30 and 31). The long-tailed diadem is present as usual, but the figure is generally more squat than before and, significantly perhaps, the long beard comes to a point and is not tied. The Varahrān scyphates with crowns A and B begin with the usual nandipada device at 3:00. Both specimens still have the mint name Balkh (Baxlo) below the sign. Crown A coins of the Balkh mint have an X above the nandipada, like some of the Hormizd I Balkh scyphates, while crown B has an inverted hook or circle and line in the same location. The Bactrian inscription on both obverses is clearly bago Oorohrano ozorko košono šaho. The reverses of these coins continue as before, but the nimbus of the deity is missing from this point onward.

During both the crown A and crown B series, a new sign appears to replace the *nandipada* on the obverse. This is called a "tulip" by Bivar



<sup>120</sup> R. Curiel and D. Schlumberger, "Trésors monétaires d'Afghanistan," MDAFA 15 (Paris, 1953), pp. 103-30. The famous Tepe Maranjan Treasure contains ten of these gold scyphates (pl. 13, no. 2, and pls. 14-16).

<sup>121</sup> Bivar, p. 29, nos. 8 and 9.

<sup>122</sup> See CII, pl. 6, no. 3 (inverted hook or circle and line), no. 4 (x shape). Also Bivar, p. 29, nos. 7-9.

and a Hun-Kushan sign by Göbl.<sup>123</sup> On these issues, the signs around the rulers' legs change significantly. On one obverse type ("tulip" with rosette in right field), the dot between the ruler's right leg and the altar has been lost, while the circle and line seen on previous issues has moved to 10:00 (Plate 49, 32). A second obverse also lacks the swastika and dot between the ruler's legs, and has an X at 9:00 (Plate 49, 33).<sup>124</sup> Both reverses are very similar. One issue of crown B scyphates has a crescent-on-pedestal sign under the "tulip," which suggests the Hephthalite sign.<sup>125</sup> The coin, however, appears to be a barbarized version of crown B with obliterated reverse and is likely to be an imitation.

The coins bearing crowns A and B are close enough in style and fabric to be considered those of one Kushano-Sasanian ruler, Varahrān I. His coinage ushers in the last phase of Kushano-Sasanian power. Balkh was still under Varahran's control, although it is entirely possible that alliances were made with threatening Hunnish tribes north of the Oxus to ensure peace, as the new "tulip" sign may indicate. 126 It is also possible that at this time the Kushano-Sasanian Empire, or at least what was left of it after Shapur II had wrested Gandhara from Kushano-Sasanian control, began to move closer to the main dynasty in Iran for protection. Shāpūr II may have made a treaty with Varahrān I Kushānshah which enabled him to keep the Kabul Valley after the reign of Hormizd II. Hormizd II Kushānshāh produced no known gold, and possibly never controlled Bactria. It may be that a dynastic split occurred at the end of Peroz II's brief reign which left Hormizd II in charge of Gandhara and possibly the Kabul Valley, while another branch of the dynasty under Varahrān I ruled at Balkh. After Hormizd's fall, Varahrān I



<sup>123</sup> Bivar, pp. 18 and 29-30, nos. 10-12, and CII, pl. 6, nos. 5 and 6, pl. 7, nos. 1-5. Göbl, Iranischen Hunnen, 1, pp. 15-21; 2, pp. 202-13. It is unclear what this change signifies. Bivar sees it as an alternative rendering of the same sign with no geographic or chronological significance. The sign also occurs on an amethyst gem in the British Museum reading, possibly Borzologgo or Borzocoggo (Göbl, 1, no. G16, pp. 231-32, 3, pl. 85, no. 16).

<sup>124</sup> CII, pl. 7, no. 1.

<sup>125</sup> CII, pl. 7, no. 3.

<sup>126</sup> Unfortunately no Hunnish sign is identical to this one, although a group of Hunnish gold scyphates which follow the Kidara group (Göbl, *Iranischen Hunnen*, 1, pp. 84-86, nos. 84 and 85; and 3, pl. 26) repeat it even using the Kidara legend.

may have made changes to his crown to signify his enlarged territory to the south, which he ruled for some time in peaceful relations with the Sasanians who controlled Gandhāra on his border.

Varahrān Kushānshāh C (Plate 49, 34) wears a crown on his scyphates so distinct that he is usually designated as Varahrān II. Here we see above a pearl band diadem a large pair of ram's horns with the lotus bud between them. On scyphates of the usual type, the signs between the ruler's feet are missing, and the swastika has migrated to a position just above the "tulip" monogram. At 9:00 there is a circle attached to a line pointing upward. The inscription is the same as that of Varahrān A and B.<sup>127</sup> The reverse is the usual motif.

An excellent silver plate of Sasanian type, showing a ruler with a ram's horn crown hunting boars in a marshy setting, is likely to be a representation of this king (Plate 52, 53). The style of this work is quite different from the central Sasanian tradition of silver hunting plates, and may have been made for Varahrān C Kushānshāh somewhere within his empire. The long, spade-shaped beard without a tie and the wavy linear pattern of the drapery are similar on both gold coin images and the plate. It has been suggested that the ram's horn crown belonged to Shāpūr II, because of a description of that king's headgear in a battle with the Romans recounted by Ammianus Marcellinus; but it should be noted that the author indicates the head of a ram on Shāpūr's helmet, not simply ram's horns. The ram's horns, however, are no doubt Iranian in inspiration, alluding



<sup>127</sup> Bivar, pp. 18 19, pl. 30, no. 12. CII, pl. 7, no. 2.

<sup>128</sup> See Harper and Meyers (above, n. 51), pp. 72-74, and pl. 123. This work belongs to Group III (hunting plates with scenes of figures wearing crowns, having typically Sasanian elements [globe surmounting crown base], but unlike those found on Sasanian coins; no evidence of an Iranian provenance, but an iconographic relationship to vessels with identifiable Sasanian kings). The vessel is large (27.6 cm diam.) and bowl-shaped. There is a Sogdian inscription on it, probably of the fifth century. Bivar (CII, p. 1) relates the inscription to that on a Kushano-Sasanian seal in the British Museum.

<sup>129</sup> See Brunner, p. 154. Bivar, *Prolegomena* (above, n. 1), pp. 327-28, uses this evidence to place Varahrān II Kushānshāh at the Battle of Amida in A.D. 360. This battle was fought with the aid of certain Chionite Huns under their king Grumbates who lost his son in it. Bivar claims that Ammianus mistakenly thought Varahrān to be Shāpūr. Actually the passage clearly states that the headdress is "aureum capitis arietini figmentum interstinctum lapillis pro diademate gestans" (14, 13).

to the war god Verethragna (Varahrān); so they may be looked on as related to the monarch's name, or to his rule contemporary with Shāpūr II, who perhaps popularized ram imagery on royal helmets. Small, light coppers, with armed bust-on-altar reverses in much worn condition, also continued through the reign of Varahran C (see Plate 48, 21 and 22).

The Varahrān of crown D is usually designated as Varahrān III. Here the crown type is so distinctive and the gold scyphate issues so crude as to signify a definite break with previous types (Plate 49, 35). The flat crown has palmette motives with a striated globe or amalaka in place of the usual lotus bud. Another distinct change is the addition of a pair of wide ribbons tied around the stem of the globe which rise up around it on either side. The pair of ribbons immediately recall the huge crescent of the crown of Peroz II. A much smaller set of secondary ribbon tails occurs surrounding the globe of the crown of the Sasanian king Varahrān IV, and may also have some connection with this motif. 130

Two different inscriptions have been read from this common but barbarous series of scyphates. One is bago Oorohno or (II)orohno ozorko košono (šao), and, on by far the greater number, bago Kiooo or Kooo . . . košono (šao), perhaps indicating that at an early time in the production of these scyphates a new ruler, Kidara, no doubt the same personage who gave his name to the Kidarites or Kidara Kushans, was at least de facto ruler of the lands of Varahrān D (Plate 51, 36). As we shall see from numismatic developments in Gandhāra, this seems plausible, since a king named Varahrān also established himself there, wearing the same crown D on a series of silver drachms introducing Sasanian elements of excellent, if eccentric, style. So, it is probable that a Varahrān D minted in both gold and silver. The reverses



<sup>130</sup> See Göbl, pl. 8, no. 144, and table 8, 1, 1a.

<sup>131</sup> The problem of what actually occurred in this series is most difficult to unravel. I tend to agree with Göbl that the crown is initially a Kushano-Sasanian one and was not created by the Kidarites (*Iranischen Hunnen*, 1, pp. 18-21; 2, pp. 52-55). See also Bivar, pp. 18-19 and 30, nos. 14-15; Curiel and Schlumberger (above, n. 120), p. 105.

<sup>132</sup> See M. F. C. Martin, "Coins of Kidara and the Little Kushans," *JRAS* (Bengal), Numismatic Supplement 47, (1937–38), Silver Jubilee Number, pp. 27–30N, pl. 2, nos. 22, 23, 26, 29 and pl. 3; hereafter cited as Martin.

of the Varahrān D/Kidara scyphates are completely illegible and some seem to have been deliberately defaced. At Tepe Maranjan in the Kabul Valley a hoard of over 300 varied drachms of Shapur II were discovered along with one scyphate of Varahran B Kushanshah, 11 of the Varahrān D/Kidara type, 28 of Ardashīr II, and 14 of Shāpūr III, the last two of whom ruled the Sasanian empire from 379 to 388.138 Clearly, the Varahrān D/Kidara scyphates must have been in full circulation by 388. The large number of fairly crude Shāpūr II drachms indicates strong Sasanian activity in the realm. None of these latest scyphates comes from Balkh, which may have been lost to the Huns around the mid-century.<sup>134</sup> According to the Wei Annals, the "Kushans" were driven out of Balkh (and Bactria) by the Huns. 135 The Huns, in a pattern of events that seemed to have repeated itself since the time of the Bactrian Greeks, displaced the Kushano-Sasanian rulers of Bactria who fled south to the shelter of the Kabul Valley and Gandhara. We may imagine that this wholesale movement of people brought both the Kushano-Sasanian rulers and their subjects into a spirit of cooperation bred of desperate circumstances. Kushans and Kushano-Sasanians had by this time intermarried, we may surmise, and the remnants of the old Kushan tribal aristocracy may well have assimilated much from their Iranian conquerors, who in turn integrated Kushan culture into their society. The Wei annals make no mention of any Kushano-



<sup>133</sup> Curiel and Schlumberger (above, n. 120), pp. 103-30; Göbl, *Iranischen Hunnen*, 2, pp. 29-30. Göbl lists 325 of Shāpūr II, 28 of Ardashīr II, and 14 of Shāpūr II.

<sup>134</sup> Certainly the Chionites were a power in Bactria allied with Shāpūr II, at least temporarily in 360, as noted above. Perhaps Shāpūr had no choice but to allow them to occupy Bactria, driving out the Kushānshāh; or perhaps he allied himself with the Chionites to force out a possible rival. The numismatic evidence for the Huns active on the Sasanian frontiers as vassals exists in a late type of drachm of Shāpūr II with Alxono inscribed on the obverse at 2:00 over the Pahlavi legend (Göbl, Iranischen Hunnen, 1, p. 54, no. 33; 3, pl. 14).

<sup>135</sup> Martin, pp. 24–25. The extract of the Wei-shu states that the Ta-Yueh-chi (Great Kushans) had their capital at Lou-Kien-chi (Balkh). They were threatened from the north by the Jouan-Jouan (Huns?) and exposed to their raids. They migrated to the west and established themselves in the town of Po-lo (Balkan, on the Caspian Sea, according to J. Marquart [above, n. 26], p. 55). Their king, named Ki-to-lo (Kidara), raised an army and crossed the Great Mountains (Hindu Kush) and invaded North India where the five kingdoms north of Kan-tho-lo (Gandhāra) submitted to him.

Sasanian rulers, most probably because at such a distance they were not recognizable as anything but Kushan. The same source goes on to relate that the brave prince Kidara crossed the mountains to the south and conquered the five kingdoms north of Gandhāra. In another entry it is stated that he left his son to rule Gandhāra from Peshāwar and advanced to the west to meet an enemy. 127

Ammianus Marcellinus tells us that Shāpūr II, for a period between 356 and 358, was occupied with disturbances on his eastern frontiers with the Kushans and Huns (Cuseni and Chionitae). In 358 he made peace with them and used contingents of his former foes in his siege of Amida in 359. By this time the Kidarites were probably menacing Gandhāra from the small kingdoms they had conquered to the north of Swat. Gandhāra became a center for controlling conflicting forces and a haven against the incursions of the Chionite Huns. If, by the

136 Martin, pp. 26–28. The Wei annals are a history in retrospect of a distant country. Since the Kushans had been located in Bactria already for 400 years or more, ethnic Kushans, Kushano-Sasanians, settled Hunnish peoples, or others living there would have been identified as Kushans.

137 Martin, p. 25.

138 Ammianus Marcellinus, 16, 9, 3. If the Chionites had moved into Bactria around 350, it is likely that they were threatening to move southward into the Kabul Valley by 356. Shāpūr II secured the region for the Sasanians for the next decade. It is difficult to tell who the "Kushans" were, but they were likely the Gandhāran branch of the Kushano-Sasanian dynasty who, prior to the Kidarites had secured Gandhāra from the control of the governor of Shāpūr II (see Appendix).

139 Ammianus Marcellinus, 19, 1, 3.

140 See above, n. 35. The Wei annals state that Kidara did not immediately conquer Gandhāra, but five kingdoms north of it. In the Ma-louan-lin (Martin, p. 25), the same Kidara is ruler of Peshāwar, obviously a somewhat later development. The movement of the Kidarites seems to be as follows: first they were driven from Bactria by the Chionite Huns, ca. 350, displaced in the debacle that ousted the Kushano-Sasanians and perhaps other peoples bordering the Oxus. Whether they were "Kushans" or a Hunnish people is not relevant here. Secondly, they fled to the east not west. Here the mistaken direction led Marquart and others to believe that they traveled to the Caspian, which is hardly likely. The best shelter by far would have lain in the upper Indus and Karakorum Mountains. Po-lo may well be Bolor or Baltistan, which is the Po-lo-lo or Po-li-ho of Hsūang-tsang (S. Beal, Buddhist Records of the Western World [London, 1884], 2, pp. 289 and 298) or the Po-lu-lai of Sung-yun (Beal, 1, p. xciii). From ca. 350 to ca. 365 the Kidarites consolidated their rule as far south as Swat, before taking Gandhāra.



mid-fourth century, Bactria had been destabilized by these incursions or occupied completely, the Kushano-Sasanian dynasty under the ram-horned Varahrān must have been overwhelmed.

It is important to reiterate that the Kushano-Sasanian rulers had created a dynastic entity, separate and sometimes hostile to the central authority of Sasanian Iran. Fairly early in the reign of Shāpūr II both Merv and Gandhāra had been lost by the Kushano-Sasanians to Shāpūr II's direct control, but as the mid-century approached a new coinage imitating the Sasanian drachm appears in Gandhāra. It does not belong to Shāpūr II, but follows directly the circulation of Shāpūr II drachms in Gandhāra. Martin and others have sought to label these drachms as the exclusive production of the Kidarites who invaded Gandhāra; and, indeed, Kidara and a number of other Kidarite rulers follow the initial issues of this series. It appears likely, however, that the issues of its first two kings, Peroz and Varahrān, belong within a Kushano-Sasanian dynasty rather than a Kidarite one; how they actually came to control Gandhāra, and the nature of their relationship with Shāpūr II and Sasanian power, can only be guessed.<sup>141</sup>

The first ruler in this Kushano-Sasanian Gandhāran silver drachm series created a totally new portrait style and imagery for his coinage. He is shown as a facing bust, diademed with the tails rising up from the shoulders on either side (Plate 50, 39). He wears a crown of ram's horns, with a central palmette between them from which rises a fluted globe with a pair of wide-arching secondary ribbon tails floating upward on either side. The usual bushy hair of Sasanian royalty and tied beard are shown, whereas the later Kidarite issues show beardless rulers. The bust is shown in intricate detail of linear drapery folds in palmette-like form falling from the V-neck of the



<sup>141</sup> Possibly the Gandhāran Kushano-Sasanian rulers were a cadet branch of the old Kushano-Sasanian dynasty, who came from Balkh by the same route as the Kidarites and at approximately the same time. They may have come down out of Swat to overwhelm Shāpūr's governor and reestablish an independent kingdom with its capital at Peshāwar. In 356–58, Shāpūr II probably faced the Chionites menacing Kabul from Bactria, and a new and hostile branch of the displaced Kushano-Sasanian dynasty of Balkh in Gandhāra. He, however, managed to pacify both while retaining the Kabul Valley for another decade.

<sup>142</sup> Göbl, Iranischen Hunnen, 3, pl. 10, nos. 11-18.

costume. To the left at 11:00 is the Brāhmī šā or shahi, and at 1:00 Piroso (king Peroz). On the reverse we find the usual Sasanian attended fire altar with triple base and capital surmounted by a bust. Attendants guard with raised swords. Various fragmentary inscriptions on the right have been read piladha, piluca, nam, or ba. 144

Some clues may be gleaned from this royal image which may serve to help puzzle out this most unusual coin type. Significantly, we have for the first time a coin with a facing bust, in a style perhaps more related to seal portraiture than to Sasanian numismatic tradition. Could it be, as Martin suggests, that we have here a visual signal of revolt against Sasanian authority, or simply a clear break with past Kushano-Sasanian and Sasanian tradition? 145 The use of the royal tied beard, diadem, etc., show ambitions worthy of the Sasanian monarch himself, but the inscription here is simply "king Peroz" in Brāhmī. The use of Brāhmī in itself may indicate an attempt to forge ties with the local population of Gandhāra. The horned crown seems likely an attempt to carry on the crown type of Varahran C and thus links the Gandhāran Peroz with the Kushānshāh who may have been his immediate predecessor. The use of the striated globe or āmalāka in place of the lotus bud is most interesting. Although Shāpūr II does not wear a striated globe on his coin portraiture, there is ample indication that it was known by the mid-fourth century in Iran as a royal crest ornament.146 In fact, a magnificent, large silver bust of Shāpūr II now



<sup>143</sup> Göbl, Iranischen Hunnen, 1, p. 10, nos. 3-1, 3, pl. 9, nos. 3-4. The ram's horns are strongly reminiscent of the same motif on the crown of Varahrān II Kushānshāh far to the north, and may be a deliberate attempt to identify with the former king.

144 Göbl, Iranischen Hunnen, 1, p. 40, nos. 3-1, 3, pl. 9, nos. 3-4. Piluca also occurs on the earliest Alchon Hunnish reverses together with parakrama, an epithet of Samudragupta (Göbl, p. 56, no. 36, pl. 11, no. 36). This may link them chronologically to both Shāpūr II and the great Gupta conqueror Samudragupta. Both were active in North India at the same time (ca. 355).

<sup>145</sup> Martin, pp. 33-34.

<sup>146</sup> See the cameo of "Shapur and Valerian" in the Bibliothèque Nationale (Ghirshman [above, n. 34], p. 152, pl. 196). Here both the globe on the head and the shoulder globes are striated. Although the work is purported to show Shāpūr I and the conquered Roman emperor Valerian on horseback, Ghirshman dates it to the fourth century. The question of the identity of the rulers shown and the actual date are problematic.

in the Metropolitan Museum of Art shows a striated globe korymbos which actually forms a kind of bud-like motif as if in layers of petals when seen from the top. (Plate 51, 54).<sup>147</sup> Thus, it may be that the striated globe is another version of the lotus bud, although this point is debatable. The pair of ribbons on Peroz's crown again recalls the huge crescent on the crown of Peroz II Kushānshāh; and if we have a king here who is of the same lineage, such a motif is not surprising. Peroz, king of Gandhāra, seems linked with his namesake Peroz II, Varahrān Kushānshāh C, and also Shāpūr II.

The silver drachms of Peroz of Gandhara must have followed the drachms of Shāpūr II already in wide circulation in Candhāra before he became king there. Thus, on the reverses an imitation of the Sasanian fire altar was utilized. This may have signaled closer ties with the central Sasanian state; but it seems more likely that Peroz took control from Shāpūr II, and was jealous of his own autonomy as indicated by the royal trappings of his coin imagery. If this happened during the 350s when the Chionites had taken Bactria, causing great panic and population shifts, immediately after the dust settled we should find the Kidarites in Swat and the upper Indus foothills above Gandhāra, and a Kushano-Sasanian ruler, Peroz, having scrambled to power in Gandhāra itself, perhaps as a champion of the local population and the old Kushan aristocracy against Sasanian rule. At first Peroz controlled only a modest area, perhaps not far beyond Peshāwar. His successor, who again carried on the dynastic name of Varahrān, took over an enlarged area and at first ruled under him, using Peroz's portrait in profile on silver drachms, but with the Pahlavi inscription kd' wrhr'n ZY kwš'n MLK' (lord Varahran, king of the Kushans) and in the right field is a Brahmi pī (Plate 50, 40).148 The reverse is similar to the Peroz silver coins. There can be no doubt that Kidara and his band were contemporaries of this Varahran. Varahran's crown D on his own coin portraits consists, as we have seen, of a row of palmettes with spreading upper diadem tails around a striated globe, and an elaborate, ruffled, long-tailed diadem ribbon behind the head (Plate



<sup>&</sup>lt;sup>147</sup> P. O. Harper, "Portrait of a King," Bulletin of the Metropolitan Museum of Art 25 (November 1966), pp. 137-46, fig. 9.

<sup>&</sup>lt;sup>148</sup> See Göbl, *Iranischen Hunnen*, 1, p. 41, no. 5; 3, pl. 9, no. 5; Martin, no. 22m, pl. 2.

50, 41). The earliest of Kidara's crowns directly imitates this one. <sup>149</sup> The reverse continues the Sasanian fire altar without the bust.

We must turn again to the Roman and Chinese historical texts to test these hypotheses. Ammianus speaks of Shāpūr II preoccupied with Chionites and Kushans between 350 and 358. The Kushan ruler with whom he may have fought and subsequently made a rather generous peace, was, in my opinion, not Kidara but the Kushānshāh Peroz, who had taken back Gandhāra from Sasanian control. The second time Shāpūr was called to the east, however, in 367 and 368, he was far more likely to have encountered the newly created kingdom of Kidara, who had conquered the Kushano-Sasanian Varahrān of Gandhāra and soon after marched west to Kabul to inflict a stunning defeat on Shāpūr II's armies in the Kabul Valley. After this defeat Kidara even went so far as to utilize a crenelated crown imitating that of Shāpūr II on his silver drachms (Plate 50, 42). 151

Possibly Varahrān, king of Gandhāra, survived by fleeing for aid to the Sasanians before his downfall. It would seem, from Mitchiner's investigations, that an enclave, probably in the Kabul Valley, continued to produce crude Sasanian-style drachms, showing the images of the Sasanian kings, Shāpūr II, Shāpūr III, and Varahrān IV. All of these bear the same name. Those of Shāpūr II which probably date from the 370s are inscribed *KD wrhr'n ZY kwš'n MLK'*, but afterward in the



<sup>149</sup> Göbl, Iranischen Hunnen, 1, pp. 43-44; 3, pl. 10, no. 11, pl. 11, nos. 11, 12, and 13.

<sup>150</sup> See Faustus of Byzantium, 5, 7, 37. This may be what the Chinese annals are referring to in their account of the march westward by Kidara to meet the Jouan-Jouan (see Martin, p. 26). It does not seem likely that the Huns were in Kabul by 367, since only Sasanian, Kushano-Sasanian, and Kidarite coins are found in the Tepe Maranjan Treasure (ca. 388). The reference to Shāpūr's adversaries by Faustus is to the Kushans, here the Kidara Kushans, or Kidarites, who in the process of consolidating their conquests pushed Shāpūr II out of the Kabul Valley.

<sup>151</sup> Göbl, Iranischen Hunnen, 1, p. 45, no. 14, 3, pl. 11, no. 15. Here the top part has become more a crescent than diadem tails. See also Martin, nos. 1 and 2. Kidara's earlier crown directly imitates that of the last Varahrān Kushānshāh of Gandhāra (Göbl, Iranischen Hunnen, 1, p. 43, no. 11; 3, pl. 10, no. 11). Certainly the fanciful variety of crowns of Kidarite rulers of the late fourth century are due to the circulation of Sasanian drachms of Shāpūr II, Shāpūr III, and Varahrān IV in the region.

380s and 390s they are simply *MLK'* wrhr'n ZY in Pahlavi.<sup>152</sup> These issues show that the Sasanians had by now reduced the power of the Kushano-Sasanian ruler to that of a provincial governor of a small enclave south of the Hindu Kush, whose authority did not survive the early fifth century.

## APPENDIX 1

## A TENTATIVE OUTLINE OF KUSHANO-SASANIAN CHRONOLOGY

From the evidence of Chinese, Armenian, and Arab sources, it appears probable that Ardashīr I attacked and defeated the Kushan king around A.D. 230. Subsequently, the Kushan Empire lost Bactria which became a vassal kingdom of Sasanian Iran. Bactria, however, was allowed to retain a subject king, as was usual with other neighboring countries conquered by Ardashīr in the east. The Kushan ruler attacked by Ardashīr was a king Vāsudeva. The most obvious identity of this monarch would be Vāsudeva I, who ruled the Kushan Empire from either KE I year 61 or 67 to year 98 or shortly thereafter. 153 Following this king, a second era of Kushan chronology in the main dynastic sequence (KE II) began with Kanishka II, who was succeeded by Vāsishka, Kanishka III, and finally by Vāsudeva II whose reign must have ended shortly after KE II year 57 when the dated Kushan inscriptions cease at Mathurā. It is improbable that Vāsudeva II could have been the ruler who lost Bactria, nor is it likely, if it was Vāsudeva I, that he survived to become a Sasanian vassal, since he had already ruled the whole Kushan Empire for over 30 years.

Some years ago J. Harmatta published a slender but fascinating piece of evidence pointing to a partition of the Kushan Empire, which



<sup>&</sup>lt;sup>152</sup> See M. Mitchiner, "Some Late Kushano-Sasanian and Early Hepththalite Silver Coins," EW 25 (1975), pp. 157–65.

<sup>153</sup> The first dated inscription bearing the name of Väsudeva occurs on a Buddhist image of the year 64 or 67 from Pālīkherā near Mathurā, and is now in the Mathurā Museum (no. 2907). See D. C. Sircar, "A Mathura Inscription of Vāsudeva," *Epigraphia Indica* 30 (1954), pp. 181-84.

he believes to have occurred just prior to the Sasanian invasion.<sup>154</sup> An unfinished Bactrian inscription found at Surkh Kotal gives the name of a "Vāsudeva, king of kings," and bears a date of year 299. Since this date falls outside either KE I (1 to 98) or KE II (1 to 57), he postulates that it must belong to an Old Saka Era (OSE), which according to van Lohuizen-de Leeuw was beginning its third century when Kanishka I inaugurated his own era.<sup>155</sup> Dates appearing to belong to the older system were used by rulers just preceding Kanishka I through the reign of his predecessor Vima Kadphises, and reappear after its third century lacuna.<sup>156</sup> If van Lohuizen-de Leeuw's hypothesis is correct, Kanishka II began his new era immediately following the century of Kanishka I, and KE II year 1 would be OSE year 301.

Furthermore, if the Vāsudeva of the Surkh Kotal inscription reintroduced the OSE in its year 299, it would be the same as KE I year 99. Thus, according to Harmatta, a ruler named Vāsudeva (who will hence-

154 J. Harmatta, "Minor Bactrian Inscriptions," Acta Antiqua Hungaricae 8 (1965), pp. 165-95. See also R. Curiel, "Inscriptions de Surkh Kotal," Journal Asiatique (1951), pp. 189-205; and W.B. Henning, "Surkh Kotal," BSOAS 18 (1956), p. 367. The stonecutter had scratched in the first line of the inscription, but had carved only the first six or seven letters. The unfinished inscription is rendered as follows: "In the 299th year, the magnificent king of kings Väsudeva, son of god, the Kushāna . . ." See also A. Maricq, "La grande inscription de Kaniska et l'éteotokharien," Journal Asiatique (1955), p. 416 and pl. 3, who originally read the date as 275, mistakenly written as 285. Harmatta, after further study, amended the reading of the date to 299.

155 Van Lohuizen-de Leeuw (above, n. 5), pp. 19 ff. and pp. 62 ff. See also R. Ghirshman, "La Probleme de la chronologie des Kouchans," in *Cuhiers d'histoire mondiale* 3 (Paris, 1957), pp. 692 ff.

156 See Rosenfield, p. 106. Rosenfield never felt entirely comfortable with the omitted 100s theory due to its lack of precedent in Indian chronology. However, he does point out that there did not seem to be any break in numismatic continuity between the first and second Kanishka eras, nor any real difference between the sculptural style of late KE I inscribed works and those of KE II. In fact, he noted that it must have been less than that which might be distinguished between works dated between the years 25 and 50 of KE I. Thus, he suggests a period of less than 25 years between the two eras, which in itself seems rather strained, especially since there is a period of at least seven years between the last inscription of Vāsudeva (98 of KE I) and that of Kanishka II's first inscription (5 of KE II). Harmatta at first had rejected Van Lohuizen-de Leeuw's hypothesis, but after further research accepted it (above, n. 154), pp. 184-85.



forth be called here the "Bactrian Vāsudeva" to avoid confusion with either Vāsudeva I or Vāsudeva II of the main dynastic sequence) declared his independence, split off from the main body of the Kushan Empire and marked this event by returning to the OSE dating system. In this regard, it may or may not be significant that on Vāsudeva Type IV protoscyphate gold issues the *nandipada*, last seen on the reverses of Vima's coins, reappears on the obverse. Is

The exact circumstances of this possible dynastic schism may never be known, or the sequence of events that occurred between the end of the reign of Vāsudeva I and the conquest of Bactria by the Sasanians under Ardashīr I. Yet, if Chinese accounts of Vāsudeva's embassy to China can be trusted, and if the identity of this ruler is Vāsudeva I, Bactria was still a part of the Kushan Empire and the schismatic Bactrian Vāsudeva had not yet appeared in the last months of A.D. 229.

According to Harmatta and others, the actual date of the Surkh Kotal inscription—i.e., OSE 299 or KE I 99—can be deduced from calculations made from dated contemporary ninth-century rock inscriptions in Bactrian, Arabic, and Brāhmī found together in the Tochi Valley. Using the known dates, the beginning of the era used in the Bactrian inscription is calculated by Harmatta to be 232. This could only be the inaugural year of the Kanishka II Era. Interestingly, if this is so, the KE II was extremely hardy, surviving the many dynastic



<sup>157</sup> Harmatta (above, n. 154), pp. 182-83. Göbl (above, n. 1), pp. 210-11 places this split at the time of a Sasanian attack, and claims the split to have been caused by it.

<sup>158</sup> Harmatta (above, n. 154), p. 185. This is called a *triratna* by the author. His assertion of some sort of kingship relationship between Vima and the Bactrian Vāsudeva is problematic. Actually, as Göbl has demonstrated, the same device occurs on some Kanishka II issues (*Iranischen Hunnen*, 3, pl. 1, no. 13).

<sup>159</sup> J. Harmatta, "Late Bactrian Inscriptions," Acta Antiqua Hungaricae 17 (1969), p. 368. See Stone B which gives the year 38 of the Laukika Era, and can be calculated to A.D. 863. The Bactrian unknown era gives a date of 632 on the same stone. Thus, 631 years must be substracted to come out with the year 1 of this era, according to Harmatta, making its inaugural year A.D. 232. See also H. Humbach, Baktrische Denkmaler, 1 (Wiesbaden, 1966), pp. 11-23, and "Die Baktrische Ara der Tochi-Inschristen," Festgabe deutscher Iranisten zur 2500 Jahrseier Irans (Stuttgart, 1971), pp. 74-80.

upheavals of later centuries to continue to be used until the age of the Šāhī kings of Kabul, whose purported ancestral line included a king Kanishka. Thus, if we follow these computations, KE II year 1, which is also OSE year 301, is A.D. 232; and OSE 299, the date of the Surkh Kotal inscription of the Bactrian Vāsudeva, is A.D. 230.

If Vāsudeva I ceased to reign over the whole Kushan Empire late in KE I 98 (A.D. 229) or early in KE I 99 (A.D. 230), this would have been a most appropriate time for a power struggle between dynastic factions led by rival claimants to the throne. The outcome of this struggle, according to Harmatta's scenario, was that the prince who became Kanishka II prevailed over the empire, while his rival the Bactrian Vāsudeva succeeded as ruler of Bactria in A.D. 230 and immediately reintroduced the OSE in its year 299. Kanishka II, although he was probably de facto Kushan monarch from 230 onward, chose to wait until the more auspicious year following the centennial of the KE I to begin his own system. In any case, a secession of Bactria from the Kushan Empire in 230 would seem to have been a foolhardy act in the face of the Sasanian threat, so much so that one might imagine that Ardashīr had a hand in the intrigues surrounding this event.

Shortly after the Bactrian Vāsudeva came to power he became a subject king to Ardashīr's new Iranian empire. We may assume that he continued to mint his own gold issues with the *nandipada* on the obverse (Rosenfield type IV), and that he remained in power at least to the end of Ardashīr's reign in A.D. 241. Whether he ruled very long after the accession of Shāpūr I is problematic. It is possible that trouble erupted in Bactria during Shāpūr's reign. A vague remembrance of this occurs in an account of Shāpūr's successful campaign against a "Pahlečak" (called anachronistically "The Turk"), whose name signifies,

160 Al-Biruni's Indika, trans. K. E. Sachau (London, 1888), 2, p. 10. This ancestral name is given as "King Kanik." Similarly, Wu-kung visited Gandhāra ca. 750 and related that the Kabul Shahs were purportedly descended from the ancient king Ki-ni-tch-'a; see S. Levi and E. Chavannes, "L'itinéraire d'Ou-k'ong," Journal Asiatique 11 (1895), p. 356. Since Kanishka II was probably the last Kushan king to hold Kabul before the Sasanian invasion, he may have left a lasting imprint on later local history. As time went by, both Kanishka I and Kanishka II were confused and amalgamated into a single ancestor.



according to Ghirshman, "king of Balkh." <sup>161</sup> Certainly, Shāpūr must have been busy consolidating his hold on the Sasanian Empire early in his reign. Evidence of this occurs in the assimilation of Tūrān and the lower Sind under the Sakanshāh. Ghirshman attributes the destruction of Begram to him ca. 243–44. <sup>162</sup> Yet, the situation was not completely stabilized until after 255 when Shāpūr was obliged to interrupt the seige of Nisibis to reestablish order on his eastern frontiers. <sup>163</sup> The successful eradication of opposition in Bactria may have marked the end of the reign of the recalcitrant vassal Vāsudeva of

161 Ghirshman (above, n. 2), pp. 160-61, and Chionites-Hephtalites, (Cairo, 1948), p. 70. The author, however, makes this Sasanian king Shāpūr II, who founded Nishapur after the victory; and it is true that Tabari tells us that Nishapur was founded by Shāpūr II (Nöldeke, Tabari [above, n. 4], p. 59). Nevertheless, an authoritative Pahlavi source clearly states that the Tūrānian Pahlečak was defeated by Shāpūr, son of Ardashīr, who could only be Shāpūr I; see J. Markwart's translation of "A Catalogue of the Provincial Capitals of Eransahr," in G. Messina, ed., Analecta Orientalia (1931), p. 12. Markwart, however, sees the name as a corruption of Pahlav-ečak, with no Kushan connections (pp. 52-53). He notes that the war against Pahlečak belongs to a series of wars beginning in Shāpūr's first regnal year and involving the Choresmians, the "Medes of the Mountains," thence to the Gilans, Dailamites, Hyrcanians, etc., around the Caspian. See also "The Ecclesiastical History of Adiabene," in Sources Syriaques (Leipzig, 1908), 1, pp. 33 and 39–43; and N. Pigulevskaja, Les villes de l'état iranien (Paris, 1963), pp. 124-25.

<sup>162</sup> See Ghirshman (above, n. 2), pp. 160 et al.; *Chionites* (above, n. 161), p. 72, and (above, n. 156), pp. 698-713.

<sup>163</sup> See Chronique de Tubari (Persian), trans. 11. Zotenberg, Paris, 1968 reprint), p. 79. According to this source, Shapur had reigned 15 years, when, in the middle of a siege of Nisibis, he was informed of an enemy attack in Khorasan. He then left Nisibis and marched to the east to defeat the enemy. Pigulevskaja (above, n. 161), p. 121, places this event in 252. Yet, if Shāpūr had been on the throne for 15 years, the event would probably have taken place not before 255 or 256. She believes that this too was a part of the general campaigns against Pahlecak. Whether this king is the same as the Bactrian Vāsudeva is unknown, but if it is we may surmise that this ruler after initially becoming a vassal of Ardashīr I attempted to revolt against Shāpūr I and may have been the subject of more than one campaign. Thus, Kushan power in Bactria was not entirely broken until around 255 or 256, when the last rebellious vassal king must have been obliterated. There is a strange reference in the Historia augusta (Jul. Capit., Valerian, 7) which mentions that, after the Emperor Valerian was captured by Shāpūr, the Bactrians declined Shāpūr's overtures and placed their services at the disposal of the Romans. This seems entirely improbable under the circumstances, and must be an item of Roman propaganda.



Bactria (Pahlečak?) in 255 or 256. It seems that this ruler had been completely quelled before the date of the SKZ in A.D. 262.

Since Kanishka II ruled at least 17 years, it is probable that he was the Kushan king who fought Shāpūr I and eventually lost the Kabul Valley to him, probably sometime between 244 and 250. Gandhāra, however, continued to belong to the Kushan Empire until after 262, and must have been ruled by both Kanishka and Vāsishka. We may reckon from Mathuran inscriptional evidence that Kanishka II ruled 17 years or more, until sometime around mid-century, and that Vāsishka who followed him ruled a decade or more, probably at least until 262, if not later. Not long after this date a thrust was made into Gandhāra by a Sasanian military leader named Peroz (possibly the brother of Shāpūr I mentioned in the SKZ) who issued a limited series of gold coins closely imitating those of Kanishka II and Vāsishka, but showing a Sasanian ruler as the sacrificing king, and on the reverse the goddess Ardoksho holding out the crown of a defeated Kushan king who is very likely Vāsishka. This Peroz, or a successor by the same name, established a Kushano-Sasanian state in the Gandhāran region, which probably functioned more or less independently, but remained small and insignificant for the next two decades.

Although the Meryshah Ardashīr, possibly also a brother of Shāpūr I, had lost his authority by 262 (since the office seems to have been abolished by Shāpūr), he may have waited until Shāpūr's death and the reign of his weak successors to found his own kingdom. He ruled western Bactria, and probably Balkh, from Merv where he minted his own coinage declaring himself "great king of the Kushans." In the decade of the 270s when Ardashīr's Bactrian kingdom flourished, the Sasanians were greatly preoccupied with the Romans on their western frontiers with little time to devote to the east. A major revolt finally broke out in 282-83 led by the brother of Varahrān II, the Sakanshāh Hormizd. This might have succeeded had not the Roman Emperor Carus died suddenly on a march to Ctesiphon, allowing the beleaguered Varahran to move his armies swiftly to the east to put down the Sakanshāh's revolt. Both Hormizd Sakanshāh and his ally Ardashīr Kushanshah perished in the debacle. The Sasanian forces of Varahran II first probably conquered Sakastan then moved north to Merv and Bactria. By 285 they had crossed the Oxus where they destroyed the monastery of Karatepe. To show his reassertion of authority, Varahrān II issued



silver drachms minted at Merv which directly followed the issues of Ardashīr Kushānshāh. These probably date from between 283 and 293.

Peroz of Gandhāra appears to have remained unscathed by the conflict, and was perhaps beyond Varahrān's reach. Soon after this episode, however, the Sasanian king once more turned his attention to affairs with Rome regarding the disposition of Armenia.<sup>164</sup> A great dynastic struggle ensued after Varahran's death which led to the dethronement of his son, the former Sakanshāh Varahrān III, by the aged Narseh, son of Shāpūr I. Narseh's Paikuli Inscription mentions a Kushan king as one of his supporters; but he seems to have been of minor importance, possibly a vassal left by Varahrān II to govern at Merv. 165 As Narseh became embroiled in a series of disastrous wars with Rome in the last decade of the third century, a power vacuum again began to develop in the East. It is most likely that during this same decade Peroz of Gandhāra gradually expanded his territories, first taking control of the Kabul Valley, then moving westward to take Herat. By a time somewhere near A.D. 300 Peroz Kushānshāh controlled a vast dominion whose centers of power ranged from Peshāwar to Khorāsān. He minted Sasanian-style silver drachms at Herat, gold scyphates which had evolved from the Vasudeva Type V issues in Bactria and the Kabul Valley, light coppers for the western part of his empire, and heavy Kushan-style coppers in Gandhāra.

If all this was accomplished by a single Peroz, by the year 300 he was probably advanced in age. His heir, who took over his empire sometime close to this date, was Hormizd I Kushānshāh, who may have begun his career as governor of Gandhāra after Peroz had expanded the size of his empire. He began a long and successful reign over vast territories which by that time included Merv, along with Herat, Bactria, Kabul, and Gandhāra, which was ruled by two governors, first Kavad, then "Meze," whose names are inscribed on his Gandhāran coppers. Clearly, by this time the Kushanshahr of Hormizd I had become a



<sup>164</sup> Between 286 and 289 Tiridates IV was installed as king of Armenia, following an accord between Diocletian and Varahrān II; see R. W. Thomson (above, n. 3), pp. 41-42 and 231-33. Thomson gives the exact year as 287.

<sup>&</sup>lt;sup>165</sup> See above, n. 73.

power to be reckoned with in Iran, and probably a real threat to its eastern frontiers in Khorāsān.

According to Mirkhond, the Sasanian king Hormizd II (303 to 309) married the daughter of the king of Kabul. At this time, this king could not have been a Kushan, but was a Kushano-Sasanian ruler whose capital was indeed Kabul. This was done, no doubt, to ward off further hostilities and cement dynastic ties with the rival kingdom. If she was the daughter of Hormizd Kushānshāh she may have been related to the royal house of Iran, since her grandfather, Peroz, was possibly the great-uncle of the Sasanian ruler. Following Mirkhond's rather gossipy story, we find that the princess from Kabul was eventually slain by Hormizd II. If there is any validity to this tale, we may imagine that this would have stirred up animosities. In any event, Hormizd II's silver drachm reverses showing a bust in the fire of the fire altar clearly point to a Kushano-Sasanian precedent.

Events surrounding the minority and early adulthood of Shāpūr II are little known. Arab historians note, however, that during this period neighbring rulers took advantage of Iran's weakness and seized control of bordering territories. Possibly, it was not until 310 or after that Hormizd I Kushānshāh annexed Merv to his empire. Hostilities with the Romans appear to have been quiescent until 343 when Constantius II invaded Adiabene. Since Shāpūr reached the age of majority at 16 (ca. 325) there would have been ample time for him to have been tiacve



<sup>166</sup> Rauzat-us-Safa (1982), p. 340.

<sup>167</sup> Rauzat-us-Safa, p. 311. According to Mirkhond (above, n. 112), when the lady refused the king's advances, he followed the bad advice of his vizier's son and had her killed, an act that he later regretted. This may be simply a cautionary tale of royal folly, or may have some element of truth.

<sup>168</sup> Tabari (Zotenberg), 2, pt. 2, ch. 16, pp. 91-92. Here we find that at the time when the infant Shāpūr II came to the Sasanian throne the Turks, Romans, Arabs and Indians attacked the empire's frontiers. Actually, as Marquart points out (above, n. 26, p. 50), the term "Turk" is anachronostic and may refer to the Kushans. The Kushans would most likely have been Kushano-Sasanians, if that is what is meant. According to Ghirshman's reconstruction of this era, during Shāpūr II's minority, the Kushan king in the north seized the region up to Merv, and in the south tried to retake Seistan along with Tūrān, Makuran, and Sind (Chionites [above, n. 161], pp. 69-70). This is what caused the Sakanshāh Shāpūr to hasten to his post in 311. If we read Kushano-Sasanian for Kushan, the scenario is more appropriate.

on the eastern front, as Ghirshman, Seeck, and others have pointed out. 169 Even during Shāpūr's infancy, an older brother, also named Shāpūr, was appointed Sakanshāh and, according to an inscription at Persepolis, left for his post in 311.170 Possibly there was some hostility on the borders of Sakastan at this time caused by the Kushānshāh Hormizd I. Perhaps the initial forays into the territories near Gandhāra were made by forces of the loyal Sakanshāh, and are signified by the earliest of the Shāpūr II Gandhāran coppers. These would probably have been contemporary with Hormizd's governor Kavad. The inscription Šaboro may actually refer to Shāpūr Sakanshāh rather than the monarch.

On the Kushan front as well as the Sasanian there may have been considerable activity with the Kushano-Sasanian Empire of Hormizd I. Overstrikes of Kavad coppers with dies of a Kushan ruler named Vāsu suggest that encounters took place on the Punjab border with Kushano-Sasanian Gandhāra. If KE II began in A.D. 232 Mathurā must have fallen to the Nagas around A.D. 290. Vāsu could have been the elusive Vāsudeva II, who probably ruled Mathurā after KE II 41, but he was more likely a separate personage who ruled the Punjab from Taxila ca. 300 or shortly afterward.<sup>171</sup> We have no real evidence of Taxila as Vāsu's capital, but it is the one logical place that would have brought



<sup>169</sup> Merv was probably Shāpūr's first priority, and may have been reclaimed from the Kushano-Sasanians by 325. From 330 to 340, Shāpūr campaigned in Gandhāra, and possibly went so far as to take Taxila. During this decade he would have had a free hand to expand his power in the East since only minor battles and skirmishes were fought on the Roman frontier during this time and up to the Battle of Singara in 344 (see Ghirshman *Chionites* [above, n. 161], p. 70).

<sup>170</sup> See Lukonin (above, n. 26), pp. 128-29, also above, n. 114.

<sup>171</sup> Cribb, pp. 104-5, also above n. 96. The differences between the Väsudeva II (post-Kanishka III) gold issues and those of Väsu are stylistically apparent; see Mitchiner, p. 463, nos. 3542-56. On nos. 3546 to 3550 we find a ga under the king's arm. This also occurs on the Väsu "seated king" coppers. On coins 3544, 3545, and 3546 there is a vi between the king's legs; on no. 3517 there is a va beneath his arm. This va also occurs in the same place on the Väsu "seated king" coppers (see no. 3567, p. 161). See above, n. 100. Mitchiner did not notice the ga as is evident in fig. 50. Although only one "Väsu" copper was discovered by Marshall at Taxila, this means little, since the Kushan site of Sirsukh has not been excavated (see Marshall, Taxila, 2, p. 788, 3, pl. 243, no. 269).

the Late Kushans into close contact with the Kushano-Sasanians of Gandhāra.

Hormizd I appears to have held his empire intact in spite of the pressure of the Sasanians and Late Kushans. His reign may have ended around A.D. 325. At that time large parts of the Kushanshahr came under direct Sasanian control. Merv was reoccupied; and there early gold dinars of Shāpūr II were minted in a style similar to those issued there by Hormizd I Kushānshāh. Confronted by increasing Sasanian military pressure, the ephemeral Kushano-Sasanian rulers Peroz II and Hormizd II had only very short reigns. During the decade between 330 and 340, the youthful Shāpūr II seems to have taken control of Gandhāra as well, minting heavy coppers with the royal bust obverse but naming Kavad and Shāpūr (again perhaps a governor). Since Shāpūr's issues are fairly common at Taxila, it is possible that he wrested it from Late Kushan rule.<sup>172</sup>

In regard to Bactria and the Kabul Valley, however, there is no evidence that Shāpūr II directly governed either of these areas at that time. Perhaps, through some suitable negotiation, a less independent Sasanian Kushānshāh was given sanction. If we follow Harmatta's dating of the Karatepe inscriptions, Varahrān I Kushānshāh was already ruling in Bactria shortly before A.D. 330. He was followed by a Varahrān II who came to power shortly after 338, but was swept away in the Chionite invasion by mid-century. Hormizd II Kushānshāh, who appears to have left no scyphates, may have ruled only the eastern part of the Kushanshahr up to 330, while Varahrān I ruled the rest.

Both Varahran I and Varahran II Kushanshah remained in relatively independent positions in regard to Shapar's authority. Each ruled approximately one decade. The reason why Shapar II did not put an end to the Kushanshahs completely after obtaining Gandhara is not known, but may have something to do with the fact that he became



<sup>172</sup> Marshall, Taxila, 2, pp. 790-91; 3, pl. 211, nos. 279–82. These are coppers of the Shāpūr "Saboro" type. Marshall believes that Taxila was conquered by Shāpūr II between 350 and 358, which is too late in my estimation for this copper series. It is more likely that Shāpūr lost Gandhāra around 350. The silver drachms of Shāpūr III (pl. 214, nos. 283 and 281) are of the eastern mint type and are probably contemporary with the Kidarite occupation.

<sup>173</sup> Sec above n. 116.

much preoccupied with Rome between 340 and 350.<sup>174</sup> Also, the Kushānshāhs in Bactria may have been useful as a buffer against the gathering swarm of Chionites who appeared on the horizon north of the Oxus at that time. Kushano-Sasanian Bactria was finally swept away by these invaders around 350.

As an added complication to these events and at approximately the same time, Gandhāra was taken over by a new Kushano-Sasanian dynasty, perhaps with some affiliation with the former, ruling from Peshāwar. Its two rulers, Peroz and Varahrān, are known by their eccentrically styled silver drachms with Brāhmī and Pahlavi inscriptions which probably directly followed the circulation of Sasanian drachms of Shāpūr II in the region. With potentially hostile forces in Bactria and Gandhāra, Shāpūr was forced to return to the east. According to Ammianus Marcellinus he spent the whole winter of 356 on the "borders of the Chionites and Kushans," no doubt trying to bring about a settlement. The Chionites were in Bactria and the Kushano-Sasanians were in Gandhāra, so it is likely that Shāpūr was encamped in the Kabul Valley between them. Both powers became his allies in 358, and probably both accompanied Shāpūr in 359 in the seige of Amida. The

The unstable situation in the Kushanshahr in the mid-fourth century was further complicated by the appearance of the Kidarites who may or may not have had a Hunnish ancestry, but probably occupied part of Bactria. At the time of the Chionite invasion, their leader Kidara, who considered himself a Kushan, fled eastward to the remote mountain



<sup>174</sup> After the death of Constantine in 337 there began a more open policy of hostility between Rome and Sasanian Iran, which eventually erupted into the battle of Singara in 311, after which time Shāpūr may have felt the need of a buffer state in Bactria.

<sup>175</sup> Ammianus infers that Shāpūr's eastern wars, which occupied much of his time between 350 and 357, turned out successfully. It is evident, however, that the Chionites were his enemy. Whether he actually fought with the Kushans (*Euseni*, 16, 9), who are probably the Gandhāran Kushano-Sasanians, is unclear.

<sup>176</sup> At the seige of Amida the Kushans are not specifically mentioned, although we find the town surrounded on its four sides by the Vertae, the Albani, the Chionitae and the Segestani (*Ammianus Marcellinus*, 19, 2, 3). Both Marquart (above, n. 26), p. 36, n. 5 and O. Maenchen-Helfen, "The Yüeh-chih Problem Re-examined," *JAOS* 65 (1945), p. 65, make the Kushans Shāpūr's allies.

valleys of Chitral and Gilgit, from which he conquered five kingdoms north of Gandhāra.<sup>177</sup> At a time shortly before 367 Kidara took Gandhāra from the last Varahrān Kushānshāh. Subsequently, he left his son to rule there and marched westward to the Kabul Valley to annihilate the last great Sasanian outpost of Shāpūr II in 367.<sup>178</sup>

By the time of the death of Shāpūr II in 379, the Kushanshahr was divided between the Chionites and Kidarites, with only a small enclave lingering in the Kabul Valley which produced crude silver drachms bearing the busts of Sasanian rulers up to the end of the fourth century.

## APPENDIX 2

## THE MERV MINT

I would like to add a few comments on the Merv mint in regard to early Sasanian relations with the Kushanshāhr. It has been postulated above that Merv was controlled by a local ruler, Ardashīr Mervshāh, under the rule of the first Sasanian king, Ardashīr I, as suggested by the SKZ. He appears to have been eliminated or at least deposed after

177 See above, n. 135. The historical imprint of the Kidarites in this remote region seems to have been a strong one. A. Cunningham long ago mentioned a Shah Kitor as ruler of the Kalash Kafirs in "Later Indo-Scythians," NC 1893, p. 93. He also took note of the Kitorman kings mentioned by al-Biruni (pp. 185-86), as well as other references, which he correctly traced back to the name of Kidara. See above, n. 140. It may well be that the Kidarites returned to their mountain kingdoms after the Hephthalite invasion in the mid-fifth century, thus reinforcing the tradition of the dynasty of Kidara.

178 Faustus of Byzantium, 7, 37. Although I do not agree with Martin and others that the Euseni (Kushans) of Ammianus were Kidarites up to 358, it seems likely that the Kushans of Faustus in 367/8 were indeed Kidarites. Certainly no other power would have been able to beat the Sasanian armies so thoroughly (see Martin, p. 32). The Maranjan Treasure shows coins of only three powers: Sasanian, Kushano-Sasanian, and Kidarite. From their sequence it would appear that the Kidarite debased scyphates show the domination of the Kabul Valley by Kidara after the defeat and flight of Shāpūr II, Curiel and Schlumberger (above, n. 154), pp. 107-9, and pls. 13, no. 2, 14, 16, 18. These appear with the Varahrān of Gandhāra crown, the inspiration of the first crown of Kidara.



Shāpūr I assumed power. I confess to have overlooked a fine dinar of Shāpūr I illustrated by Mochiri which clearly shows at 1:00 on the reverse the mint name of Merv.<sup>179</sup> This may be, in fact, the earliest of all Sasanian mintmarks, and shows decidedly the presence of Shāpūr I at Merv.

During a period of time bounded by the death of Shāpūr I in 272 and the suppression of the revolt in the east by Varahrān II around 285, a separate ruler, Ardashīr Kushānshāh, ruled Kushan territories from Mery, using on the obverse of his copper coins the mintmark MR in front of his profile bust. Ardashīr's nascent kingdom was very likely destroyed by Varahran II who himself minted drachms at Merv with the mint name in the same location on the obverse of his issues. Göbl indicates what appears to be a Mery mint name on Narseh's drachm reverses of one type. 180 Recently, I was shown an excellent dinar of his successor Hormizd II (303-9) in the BM which clearly has the same mint name above the bust in the fire of the fire altar on the reverse (Plate 51, 55). Joe Cribb pointed out the striking similarities between the reverse of this coin and an early Shāpūr II (Plate 51, 51) in the ANS. If the same die was used, it would have had to have been recut, obliterating the bust in the flames and adding the royal investiture insignia on the altar shaft. This, I am told, would not have been uncommonly difficult. If this is true it appears to indicate that Hormizd II ruled Merv until his death, minting dinars there of very fine detailed style. After his death in 309 a new die would probably have been sent to Mery for the obverse of its dinars, showing the infant Shāpūr II as an adult bearded king wearing his personal crown. The reverse die might well have remained that of Hormizd II with some significant recutting of details. Even if this is not the case, the reverses of the BM Hormizd II dinar and the ANS Shāpūr II dinar are so close that they must form a tight chronological sequence. This suggests that at the outset of the infant Shāpūr II's reign, Merv was still a part of the Sasanian Empire. After this period of time (around 309-15), for a decade or more, however, there is a hiatus in Shāpūr's Merv issues. When the adult Shāpūr II began to mint at Merv once again, his coins, virtually all drachm types, are of a completely



Mochiri (above, n. 80), p. 35, fig. e; p. 78, fig. 125 in the Foroughi collection.

<sup>180</sup> Göbl, Sasanian Numismatics, table 5, under Crown II.

different style, with a different type of royal bust and a reverse which depicts a throne/altar with Merv written vertically beside the altar shaft (Plate 51, 52). The issues of Hormizd I Kushānshāh follow the earlier sequence and should be placed within the hiatus (Plate 51, 28).

## APPENDIX 3

# AN UNUSUAL CROWN OF SHĀPŪR II

Mochiri also illustrates a drachm in his collection which is, as far as I know, of a unique type. It shows a well-defined bust of Shāpūr II on the obverse wearing what appears at first glance to be his usual crown. Vertically in front of the bust the full name of Sakastan is written in Pahlavi. This in itself is unusual. Yet the most striking feature of this coin is the crown. All of Shāpūr II's crown types show the secondary ribbons below the korymbos projecting in small short tails toward the back. Here, however, they appear much larger and project up on either side of the korymbos, like the ribbon talis on Varahrān's crown D and the late Gandhāran drachms. What might this mean? Certainly there must be a relationship in time between this crown type of Shāpūr II minted in Sakastan and those of the Kushānshāhs. Possibly Shāpūr's unusual crown ribbons were a local creation of Sakastan; but it seems more likely that the ribbon style of Varahrān Kushānshāh's crown D formed the model.

#### KEY TO PLATES 47 52

# Copper Issues

- 1. Shāpūr I. BM, 3.40
- 2. Ardashīr Kushānshāh. W. Spengler coll., 2.55
- 3. Ardashīr Kushānshāh. C. Burns coll., 3.36
- 4. Peroz Kushānshāh. BM, 6.20



<sup>&</sup>lt;sup>181</sup> Mochiri (above, n. 80), p. 136, fig. 337.

<sup>182</sup> Göbl, Sasanian Numismatics, table 6.

- 5. Peroz Kushānshāh. M. Carter coll., 4.50
- 6. Peroz Kushānshāh. M. Carter coll., 4.25
- 7. Peroz Kushānshāh. Oxford, 2.75
- 8. Peroz Kushānshāh. W. Spengler coll., 1.95
- 9. Peroz Kushānshāh. M. Carter coll., 1.75
- 10. Hormizd I Kushānshāh. M. Carter coll., 2.35
- 11. Hormizd I Kushānshāh. W. Spengler coll., 2.15
- 12. Hormizd I Kushānshāh. W. Spengler coll., 2.40
- 13. Hormizd I Kushānshāh, inscribed Kavad. W. Spengler coll., 3.85
- 14. Hormizd I Kushānshāh, inscribed "Meze." W. Spengler coll., 4.19
- 15. Peroz II Kushānshāh. M. Carter coll., 2.15
- 16. Peroz II Kushānshāh, inscribed "Meze." M. Carter coll., 3.50
- 17. Hormizd II Kushānshāh. W. Spengler coll., 1.90
- 18. Hormizd II Kushānshāh, inscribed "Meze." W. Spengler coll., 3.65
- 19. Shāpūr II. W. Spengler coll., 4.40
- 20. Shāpūr II, inscribed Kavad. W. Spengler coll., 3.60
- 21. Varahrān I Kushānshāh. M. Carter coll., 1.85
- 22. Varahrān II Kushānshāh. M. Carter coll.

#### Gold Issues

- 23. Peroz Kushānshāh. BM, C11, pl. 8, 4, 7.85
- 24. Peroz Kushānshāh. BM, CII, pl. 5, 2, 7.94
- 25. Peroz Kushānshāh. ANS, 7.00
- 26. Hormizd I Kushānshāh. BM, CII, p. 5, 4, 7.86
- 27. Hormizd I Kushānshāh. ANS, 7.00
- 28. Hormizd I Kushānshāh. BM, CII, p. 8, 3, 7.17 (Plate 51)
- 29. Peroz II Kushānshāh. BM, 7.92
- 30. Varahrān I Kushānshāh. BM, CII, pl. 6, 4, 7.85
- 31. Varahrān I Kushānshāh. BM, *CII*, pl. 6, 3, 7.62
- 32. Varahrān I Kushānshāh. BM, CII, pl. 6, 6, 7.86
- 33. Varahrān I Kushānshāh. BM, *CII*, pl. 6, 5, 7.80
- 34. Varahrān II Kushānshāh. BM, CII, pl. 7, 2, 7.99
- 35. Varahrān III Kushānshāh. W. Spengler coll., 7.89
- 36. Kidara Kushānshāh. In trade (Plate 51)



### Silver Issues

- 37. Peroz Kushānshāh. BM, CII, pl. 8, 1, 4.09
- 38. Hormizd I Kushānshāh. BM, 4.50
- 39. Peroz (of Gandhāra) Kushānshāh. BM, Göbl, *Iranischen Hunnen* 3, pl. 9, 4, 2, 3.80
- 40. Peroz (of Gandhāra) Kushānshāh. BM, C11, p. 8, 5, 3.93
- 41. Varahrān (of Gandhāra) Kushānshāh. BM, CII, p. 8, 6, 3.64
- 42. Kidara Kushānshāh. BM, Göbl, Iranischen Hunnen 3, pl. 11, 14, 1, 3.65

## Comparative material

- 43. Sasanian drachm of Varahrān II (obv.). R. Williams coll., Mitchiner, Oriental Coins, no. 845
- 44. Indo-Greek tetradrachm of Hermaeus (rev.). BM
- 45. Sasanian silver plate from Sari. Teheran Museum
- 46. Copper coin of Ardamitra (?) of Tūrān (rev.). ANS
- 47. Copper coin of Vāsu overstruck on Hormizd I Kushānshāh, inscribed Kavad. W. Spengler coll.
- 48. Copper of Late Kushan ruler, Vāsu. W. Spengler coll.
- 49. Copper coin of Hormizd II Kushānshāh (rev.). BM
- 50. Sasanian drachm of Hormizd II (rev.). ANS
- 51. Sasanian dinar of Shāpūr II. ANS
- 52. Sasanian drachm of Shāpūr II. R. Williams coll.
- 53. Kushano-Sasanian silver plate with royal boar hunt. Leningrad, Hermitage
- 54. Silver head of Sasanian king (frontal and viewed from above).

  MMA
- 55. Sasanian dinar of Hormizd II. BM



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# PLATES



Aeolian Myrina





Aeolian Myrina



Aeolian Myrina



Plate 4



Aeolian Myrina





Aeolian Myrina



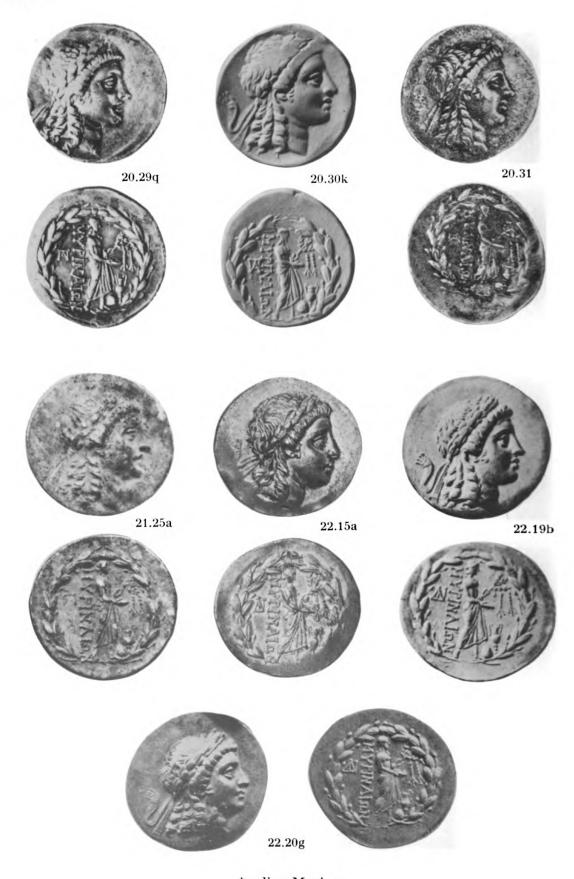


Aeolian Myrina



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Plate 10



Aeolian Myrina





Aeolian Myrina



Plate 12



Aeolian Myrina





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Plate 14



Aeolian Myrina





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Aeolian Myrina



Plate 10



Aeolian Myrina





Aeolian Myrina



Plate 12



Aeolian Myrina





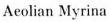




Plate 14



Aeolian Myrina





Aeolian Myrina



Plate 16



Aeolian Myrina

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Aeolian Myrina





Aeolian Myrina





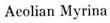
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Aeolian Myrina







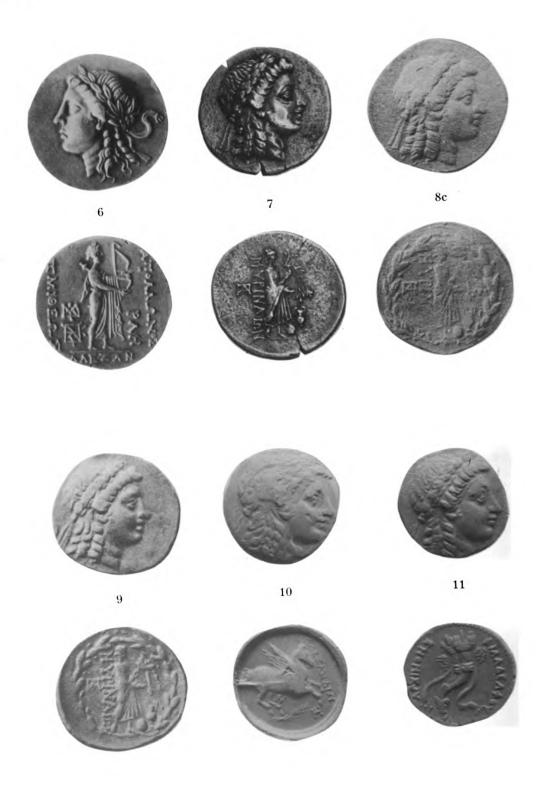




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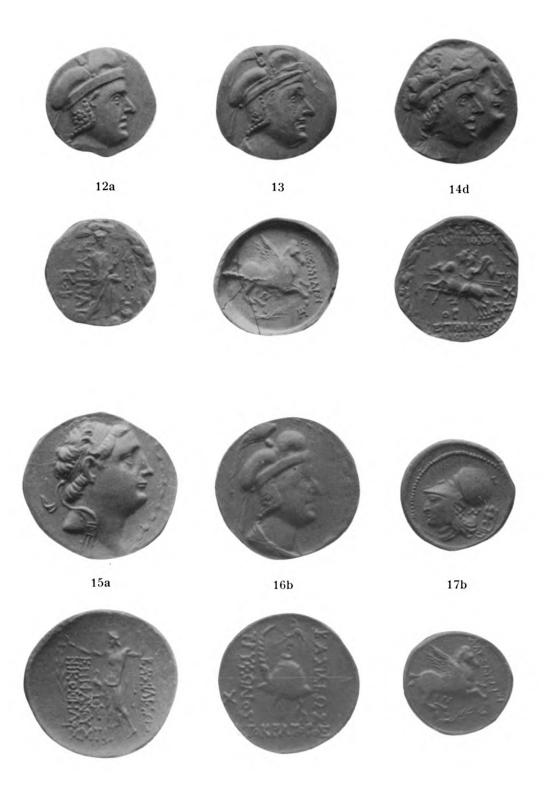


Myrina and Related Forgeries



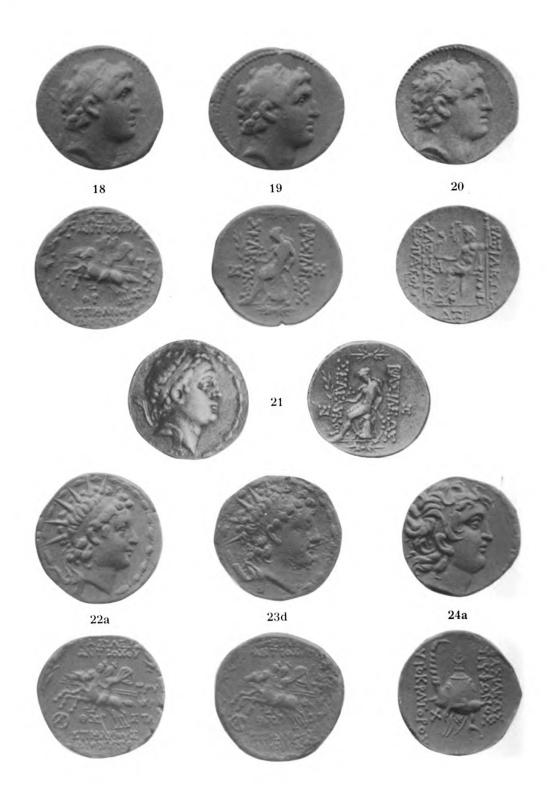
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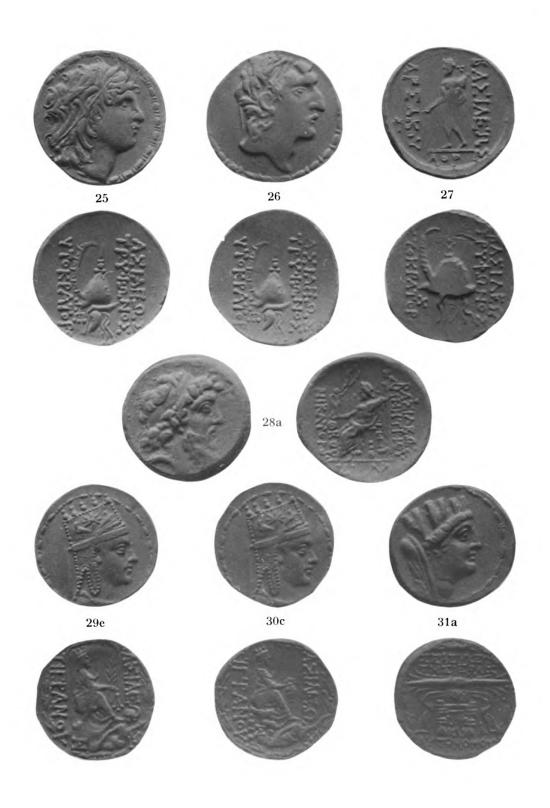
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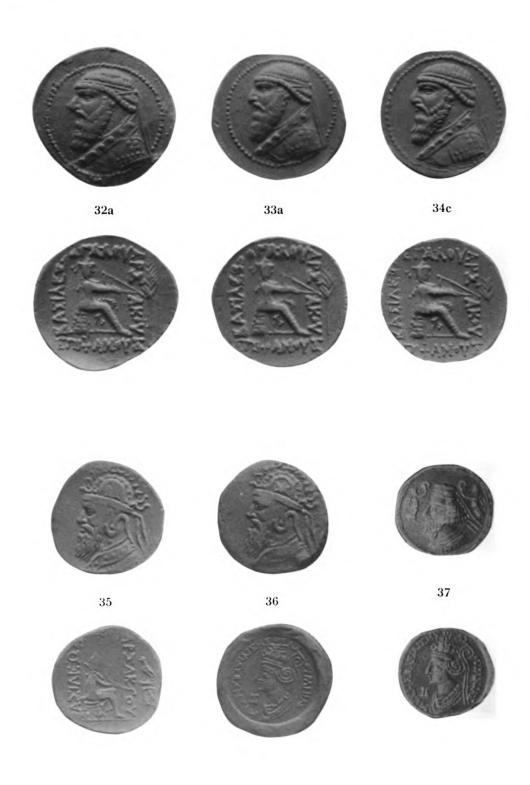
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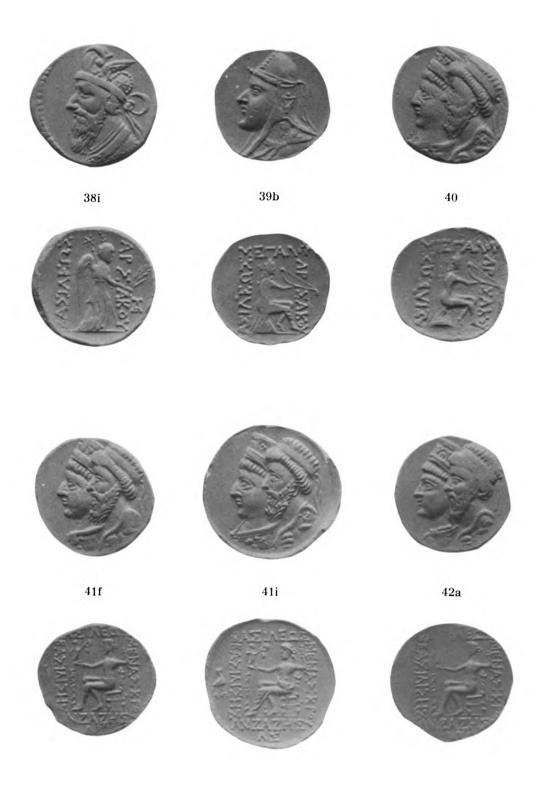
Myrina and Related Forgeries





Myrina and Related Forgeries





Myrina and Related Forgeries

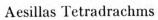




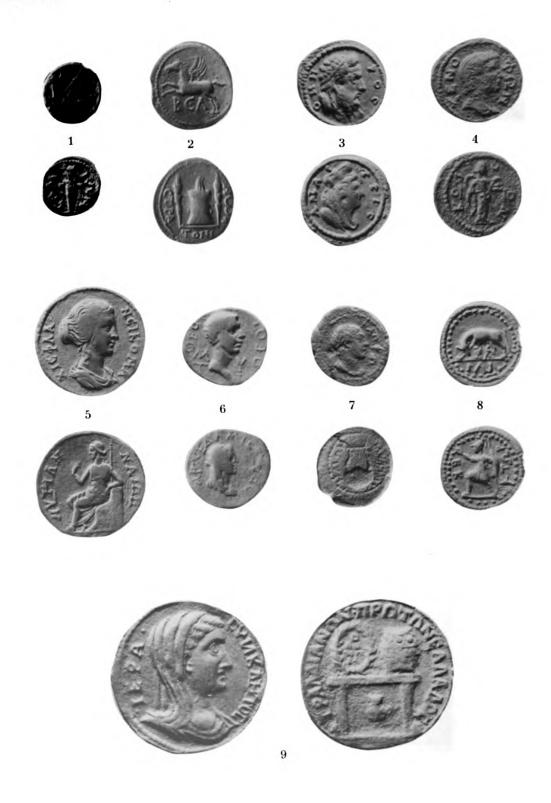
Aesillas Tetradrachms





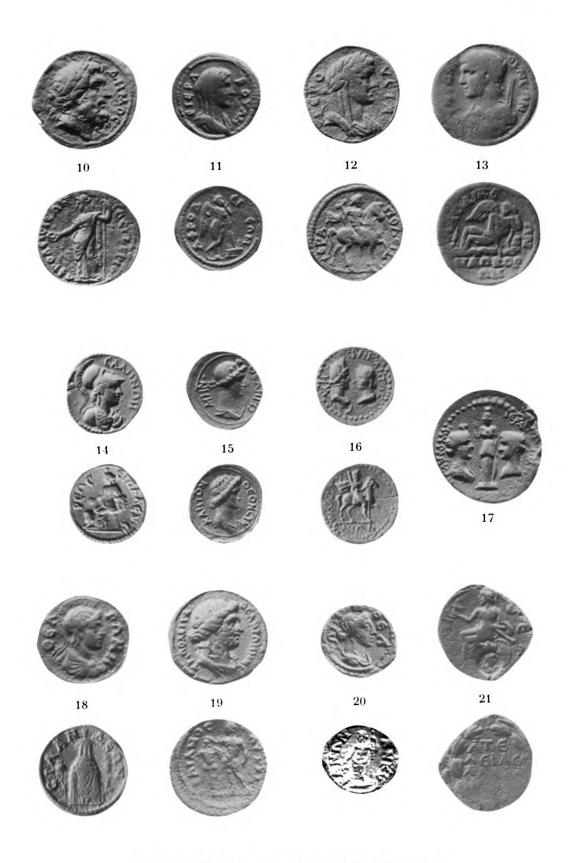






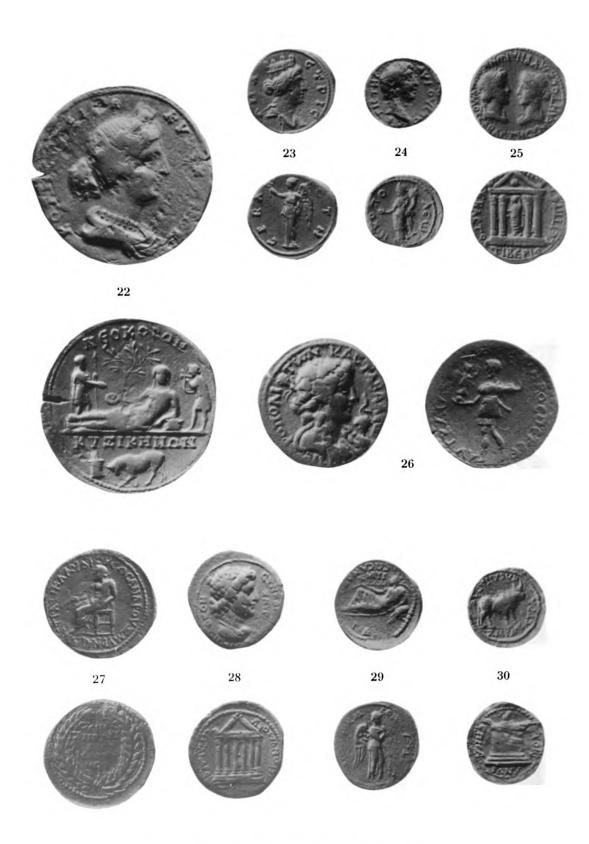
So-called Pseudo-autonomous Greek Imperials





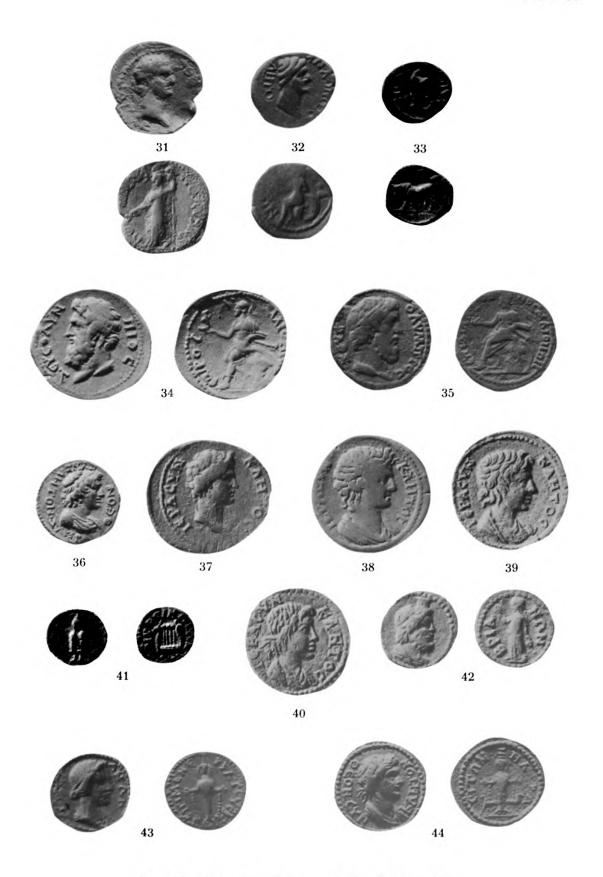
So-called Pseudo-autonomous Greek Imperials





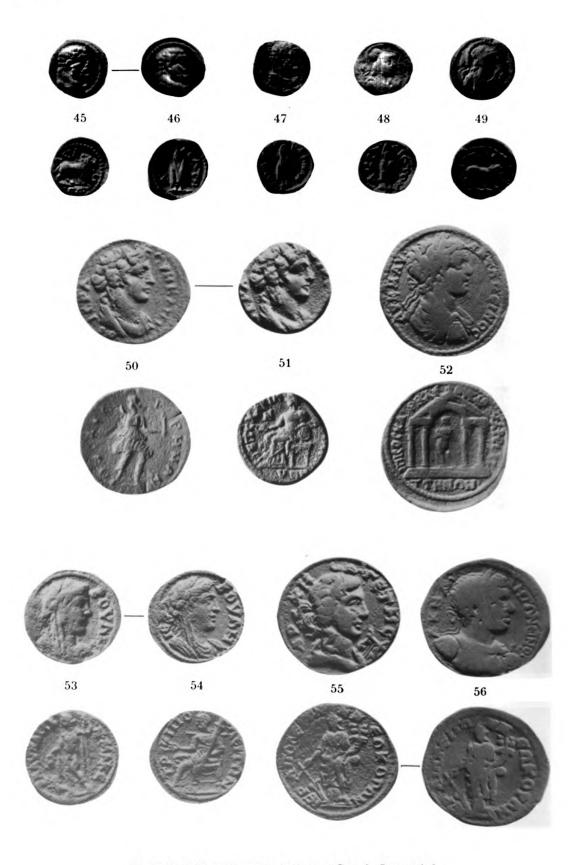
So-called Pseudo-autonomous Greek Imperials





So-called Pseudo-autonomous Greek Imperials





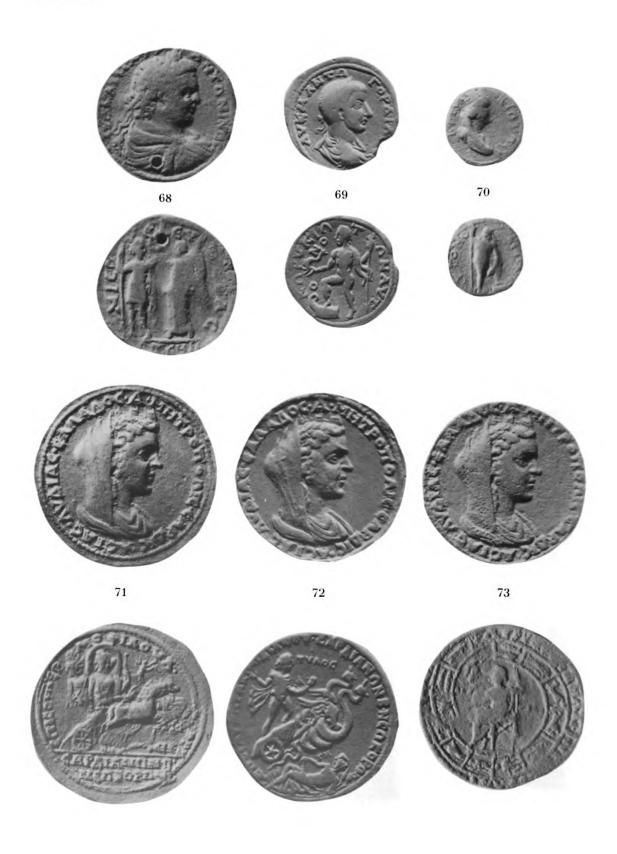
So-called Pseudo-autonomous Greek Imperials





So-called Pseudo-autonomous Greek Imperials

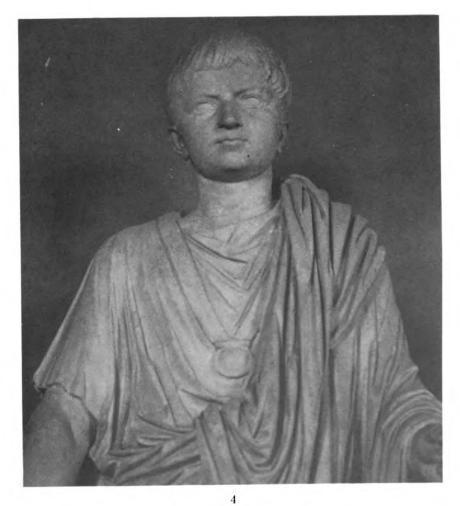




So-called Pseudo-autonomous Greek Imperials



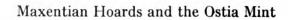




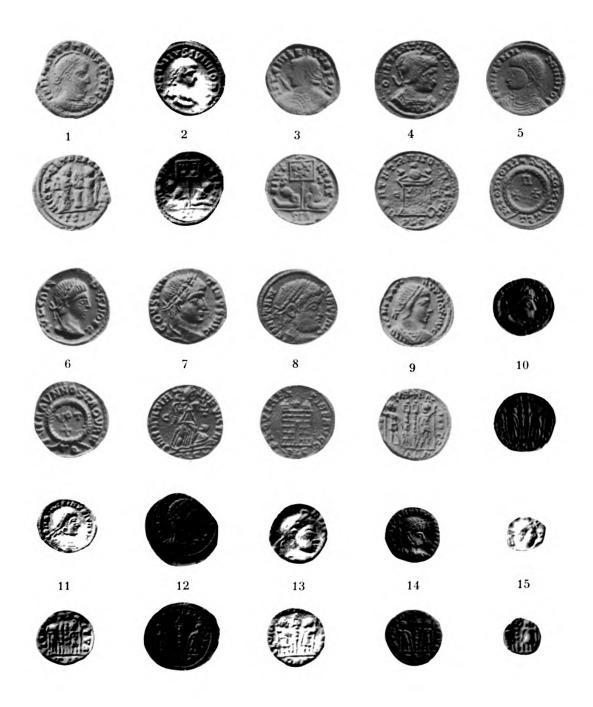
Gaius Caesar on Horseback

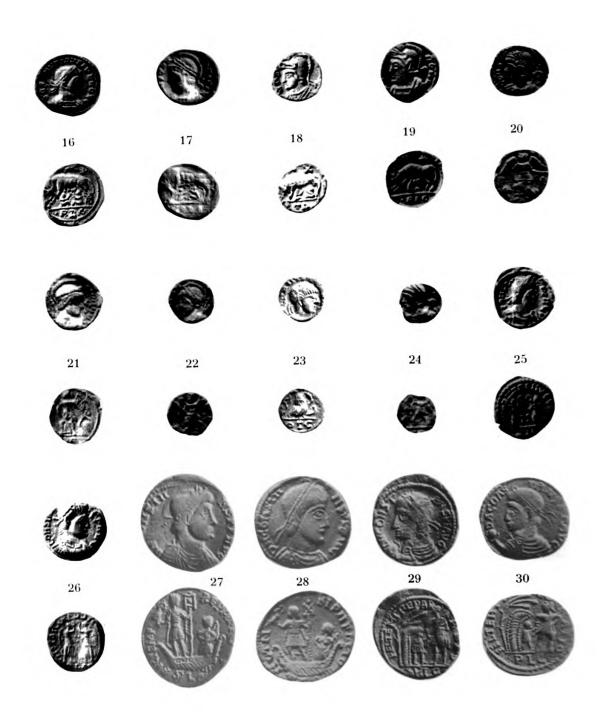




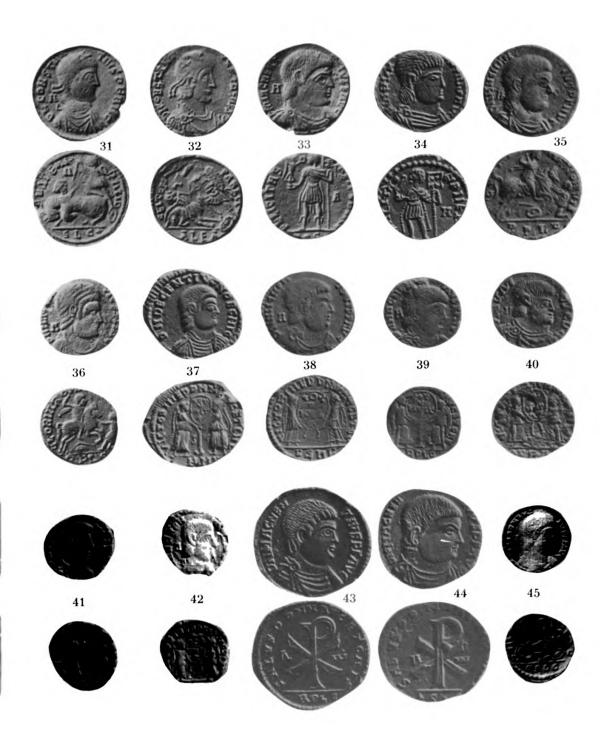






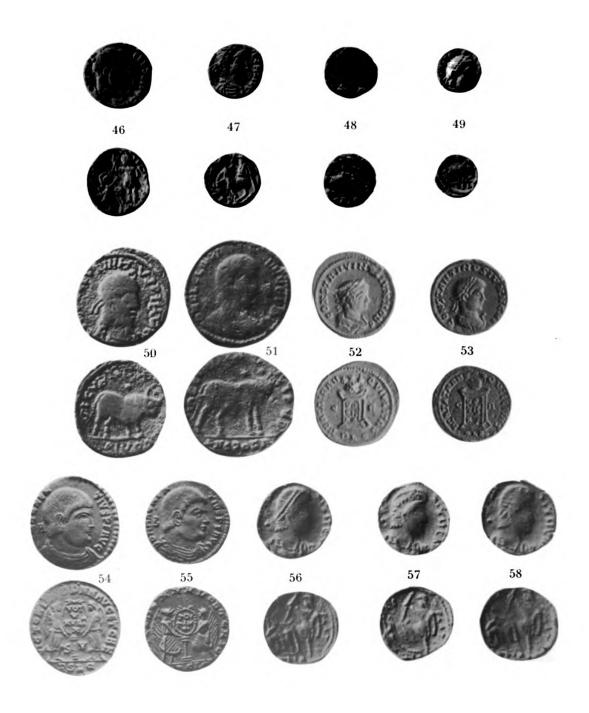


Imitations of Late Roman Bronze Coins



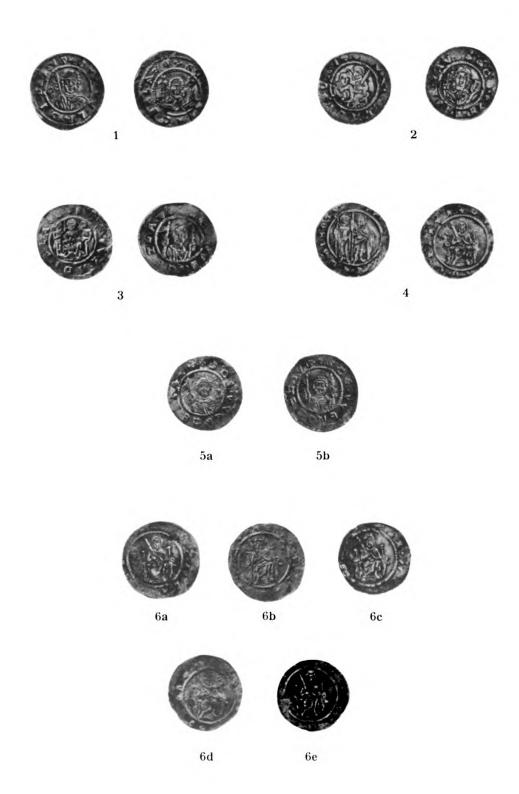
Imitations of Late Roman Bronze Coins





Imitations of Late Roman Bronze Coins





Hoard of Vladislav I



Plate 46



Fourteenth Century Coin Portrait

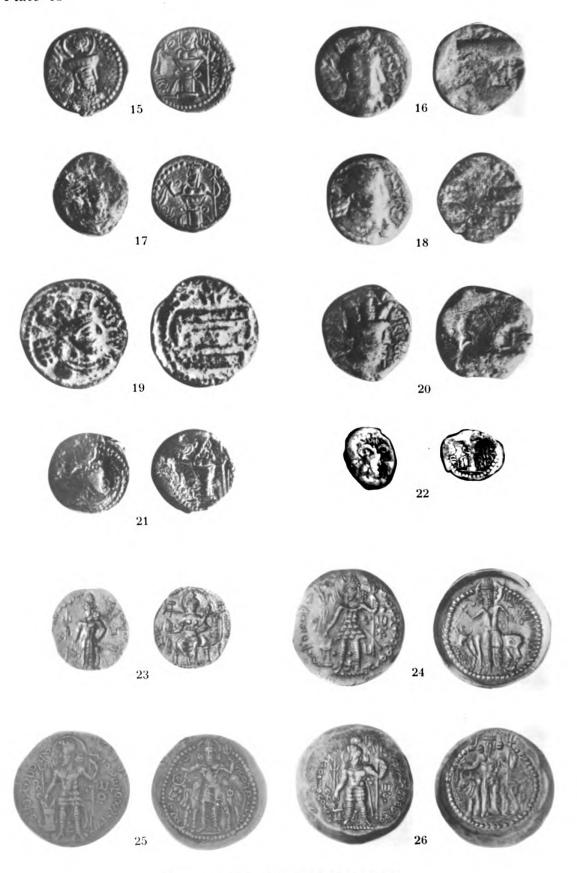




Coinage of the Kushano-Sasanians



Plate 48



Coinage of the Kushano-Sasanians





Coinage of the Kushano-Sasanians



Plate 50



Coinage of the Kushano-Sasanians





Coinage of the Kushano-Sasanians







Coinage of the Kushano-Sasanians











